Oligomer A11 Polyclonal Antibody

**Catalog Number** AHB0052

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>50 µg</td>
</tr>
<tr>
<td>Host/Isotope</td>
<td>Rabbit / IgG</td>
</tr>
<tr>
<td>Class</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Type</td>
<td>Antibody</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic molecular mimic of soluble oligomers.</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Unconjugated</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Concentration</td>
<td>1.0 mg/mL</td>
</tr>
<tr>
<td>Purification</td>
<td>purified</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>PBS, pH 7.4</td>
</tr>
<tr>
<td>Contains</td>
<td>0.1% sodium azide</td>
</tr>
<tr>
<td>Store at</td>
<td>4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.</td>
</tr>
</tbody>
</table>

**Species Reactivity**

| Species reaction | Human, Mouse, Rat |
| Published species | Rat, Fruit fly, Bacteria, Zebrafish, Cat, Mouse, Human, Not Applicable |

**Tested Applications**

| Dot blot (DB) | 0.1-1 µg/mL |
| ELISA (ELISA) | 0.1-1 µg/mL |
| Immunohistochemistry (IHC) | 1-5 µg/mL |
| Neutralization (Neu) | Assay-dependent |
| Western Blot (WB) | Assay-dependent |

**Published Applications**

| ELISA (ELISA) | See 3 publications below |
| Western Blot (WB) | See 19 publications below |
| Dot blot (DB) | See 22 publications below |
| Miscellaneous PubMed (Misc) | See 11 publications below |
| Immunohistochemistry (IHC) | See 13 publications below |
| Immunohistochemistry (Frozen) (IHC (F)) | See 1 publications below |
| Immunocytochemistry (ICC/IF) | See 8 publications below |
| Flow Cytometry (Flow) | See 1 publications below |
| Immunoprecipitation (IP) | See 2 publications below |
| Neutralization (Neu) | See 1 publications below |
| Immunohistochemistry - Free Floating (IHC (Free)) | See 1 publications below |

**Product specific information**

This antibody recognizes amino acid sequence-independent oligomers of proteins or peptides. A11 does not recognize monomers or mature fibers of proteins or peptides. A11 reacts with soluble AB42 oligomers and does not react with soluble low molecular weight AB40 or AB40 fibrils. A11 recognizes oligomeric species of several other amyloidogenic polypeptides including AB42, human insulin, prion, polyglutamine, lysozyme, alpha-synuclein and yeast prion Sup35. Oligomeric AB42 is recommended as a positive control, monomeric and fibrillar AB42 as negative controls.

**Background/Target Information**

Many degenerative diseases are known to be related to the accumulation of misfolded proteins called, amyloid fibrils. Soluble amyloid oligomers are considered as the principal pathogenic species which play an important role in the formation of amyloid fibrils; therefore, oligomers are involved in the pathogenesis of the many neurodegenerative diseases. This anti-oligomer antibody provides a facile means of assessing the significance of oligomers in disease pathogenesis.

Oligomer A11 Antibody (AHB0052) in WB

Rabbit Anti-Oligomer (A11) Polyclonal Antibody. 1 µg of soluble Abeta42 monomers, Abeta42 oligomers, Ab42 fibrils, IAPP oligomers and alpha-Synuclein oligomers was applied to a nitrocellulose membrane and probed with Rabbit Anti-oligomer (A11) polyclonal antibody (top row; Product # AHB0052) or with 6E10 (bottom row, Product # 44-352). Anti-oligomer antibody recognizes all types of oligomers, but not monomers or fibrils. 6E10 recognizes all species of Abeta without regard to conformation, but not IAPP or alpha-Synuclein.
**3 ELISA References**

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer's research &amp; therapy (Dec 2022; 14;)</td>
<td>AHB0052 was used in ELISA and immunohistochemistry to study the retina of Octodon degus for Alzheimer's disease-related protein expression.</td>
</tr>
<tr>
<td>Not Applicable / Not Cited</td>
<td>&quot;Alzheimer’s research &amp; therapy&quot;</td>
</tr>
</tbody>
</table>

**19 Western Blot References**

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>AHB0052 was used in ELISA to study the varying conformations of amyloid- when bound to the substrates HN, AChE, and IGFBP-3.</td>
</tr>
<tr>
<td>Mouse / Not Cited</td>
<td>FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Apr 2020; 34: 5628) &quot;&lt;sub&gt;2&lt;/sub&gt;-adrenoceptor activation improves skeletal muscle autophagy in neurogenic myopathy.&quot;</td>
</tr>
<tr>
<td>Mouse / 1:2000</td>
<td>Alzheimer's research &amp; therapy (Nov 2022; 14;) &quot;Aryloxypropanolamine targets amyloid aggregates and reverses Alzheimer-like phenotypes in Alzheimer mouse models.&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable / 1:1000</td>
<td>AHB0052 was used in Western Blotting to indicate that the cerebral amyloid beta dimer plays an important role in Alzheimer's disease pathogenesis, so targeting this dimer is a promising strategy for preventing this disease.</td>
<td></td>
<td>Zhang, J., Chen, B., Lu, J., Wu, Y., Wang, S., Yao, Z., Zhu, L., Qiao, Y., Sun, Q., Qin, W., Zhao, Q., Jia, J., Wei, C.</td>
<td></td>
</tr>
</tbody>
</table>

**Human / 1:500**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Not Applicable / Not Cited**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Fruit fly / Not Cited**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Mouse / 1:1000**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Not Applicable / Not Cited**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Mouse / 1 µg/mL**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>

**Mouse / 1:1000**

<table>
<thead>
<tr>
<th>Study Description</th>
<th>PubMed Article URL</th>
<th>Author(s)</th>
<th>Additional Information</th>
</tr>
</thead>
</table>
AHB0052 was used in Western Blotting to investigate the inhibitory effects of SPA1413 on both amyloid- fibrilization and oligomerization to treat Alzheimer's disease.

Rat / Not Cited
British journal of pharmacology (Mar 2022; 179: 1033)
"The potential anti-amyloidogenic candidate, SPA1413, for Alzheimer's disease."
PubMed Article URL:http://dx.doi.org/10.1111/bph.15691

Bacteria / Not Cited
Traffic (Copenhagen, Denmark) (May 2021; 22: 153)
"Microglial remodeling of actin network by Tau oligomers, via G protein-coupled purinergic receptor, P2Y12R-driven chemotaxis."
Author(s):Das R,Chinnathambi S
PubMed Article URL:http://dx.doi.org/10.1111/tra.12784

Mouse / 1:1,000
Cell death & disease (Feb 2019; 10: )
"Microglia as modulators of exosomal alpha-synuclein transmission."
PubMed Article URL:http://dx.doi.org/10.1038/s41419-019-1404-9

Human / Not Cited
FASEB journal : official publication of the Federation of American Societies for Experimental Biology (May 2013; 27: 1847)
"The cellular prion protein traps Alzheimer's A in an oligomeric form and disassembles amyloid fibers."
Author(s):Younan NO,Sarell CJ,Davies P,Brown DR,Viles JH
PubMed Article URL:http://dx.doi.org/10.1096/fj.12-22588

Human / Not Cited
Biochemical and biophysical research communications (Apr 2020; 524: 923)
"Targeting Hsc70-based autophagy to eliminate amyloid oligomers."
Author(s):Dou J,Su P,Xu C,Wen Z,Mao Z, Li W
PubMed Article URL:http://dx.doi.org/10.1016/j.bbrc.2020.02.016

Human / 1:500
PloS one (Feb 2016; 10: )
"Cytotoxic helix-rich oligomer formation by melittin and pancreatic polypeptide."
Author(s):Singh PK,Ghosh D,Tewari D,Mohite GM,Carvalho E,Jha NN,Jacob RS,Sahay S,Banerjee R,Bera AK,Maji SK
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0120346

Human / Not Cited
ACS chemical neuroscience (Apr 2015; 6: 588)
"Novel antioxidants protect mitochondria from the effects of oligomeric amyloid beta and contribute to the maintenance of epigenome function."
Author(s):Mastroeni D,Khdour OM,Arce PM,Hecht SM,Coleman PD
PubMed Article URL:http://dx.doi.org/10.1021/acschemneuro.5b00323

22 Dot blot References

Species / Dilution
Summary

AHB0052 was used in Dot blot to propose that structured RNAs prevent p53C aggregation through surface interaction and play a role in regulation of the tumour suppressor protein.

Human / 1:1000
The Journal of biological chemistry (Jun 2017; 292: 9345)
"Distinct modulatory role of RNA in the aggregation of the tumor suppressor protein p53 core domain."
PubMed Article URL:http://dx.doi.org/10.1074/jbc.M116.762096


NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD LIMITED TO REFUND, REPLACEMENT OF OR REPAIR FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OTHER REMEDY WHETHER EXPRESS OR IMPLIED. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD LIMITED TO REFUND, REPLACEMENT OF OR REPAIR FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OTHER REMEDY WHETHER EXPRESS OR IMPLIED.

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA
thermofisher.com/contactus
AHB0052 was used in dot blot to ask if nuclear depletion of TDP-43 contributes to Alzheimer’s disease pathogenesis.

**Mouse / Not Cited**

*Acta neuropathologica* (Dec 2016; 132: 859)

"Depletion of TDP-43 decreases fibril and plaque -amyloid and exacerabtes neurodegeneration in an Alzheimer's mouse model."

Author(s):La Clair KD,Donde A, Ling JP, Jeong YH, Chhabra R, Martin LJ, Weng PC

PubMed Article URL:http://dx.doi.org/10.1007/s00401-016-1637-y

**Mouse / Not Cited**

*Annals of neurology* (Aug 2011; 70: 286)

"Application of immunosignatures to the assessment of Alzheimer’s disease."

Author(s):Restrepo L, Stafford P, Magee DM, Johnston SA

PubMed Article URL:http://dx.doi.org/10.1002/ana.22405

**Human / Not Cited**

*Nature neuroscience* (Jan 2005; 8: 79)

"Natural oligomers of the amyloid-beta protein specifically disrupt cognitive function."

Author(s):Cleary JP, Walsh DM, Hofmeister JJ, Shankar GM, Kuskowski MA, Selkoe DJ, Ash KH

PubMed Article URL:http://dx.doi.org/10.1038/nmn1372

AHB0052 was used in Dot blot to aggregate -synuclein in the presence of 4-hydroxynonenal and docosahexaenoic acid, and purify the -synuclein oligomers using size exclusion chromatography.

**Rat / 1:500**

*PloS one* (Dec 2019; 14: )

"Two conformationally distinct -synuclein oligomers share common epitopes and the ability to impair long-term potentiation."

Author(s):van Diggelen F, Hrle D, Apetri M, Christiansen G, Rammes G, Tepper A, Otzen DE

PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0213663

**Mouse / 1:2000**

*Alzheimer’s research & therapy* (Oct 2022; 14: )

"Gossypetin ameliorates 5xFAD spatial learning and memory through enhanced phagocytosis against A."

Author(s):Jo KW, Lee D, Cha DG, Oh E, Choi YH, Kim S, Park ES, Kim JK, Kim KT

PubMed Article URL:http://dx.doi.org/10.1186/s13195-022-01096-3

AHB0052 was used in Dot blot to suggest that amyloid- oligomers are more important than senile plaques for neurofibrillary tangles formation and the subsequent neurodegeneration.

**Cat / 1:1000**

*Acta neuropathologica communications* (Dec 2015; 3: )

"The domestic cat as a natural animal model of Alzheimer’s disease."

Author(s):Chambers JK, Tokuda T, Uchida K, Ishii R, Tatebe H, Takahashi E, Tomiyama T, Une Y, Nakayama H

PubMed Article URL:http://dx.doi.org/10.1186/s40478-015-0258-3

AHB0052 was used in Dot Blot to study how gossypetin showed protective effects against AD by enhancing microglial A phagocytosis.

**Mouse / 1:1000**

*Scientific reports* (Nov 2016; 6: )

"A scFv antibody targeting common oligomeric epitope has potential for treating several amyloidoses."

Author(s):Zhao J, Liu XM, Zhu J, Liu SY, Lu S, Xu PX, Yu XL, Liu RT

PubMed Article URL:http://dx.doi.org/10.1038/rep36631

AHB0052 was used in Dot blot to demonstrate the protective effects of an oligomer-specific single-chain fragment variable domain in Parkinson’s and Huntington’s disease mouse models.

**Human / 1:10**

*Molecular neurobiology* (Sep 2020; 57: 3803)

"The Sigma-2 Receptor/TMEM97, PGRMC1, and LDL Receptor Complex Are Responsible for the Cellular Uptake of A42 and Its Protein Aggregates."

Author(s):Riad A, Lengyel-Zhand Z, Zeng C, Weng CC, Lee VM, Trojanowski JQ, Mach RH

PubMed Article URL:http://dx.doi.org/10.1007/s12035-020-01988-1

AHB0052 was used in Dot blot to aggregate -synuclein in the presence of 4-hydroxynonenal and docosahexaenoic acid, and purify the -synuclein oligomers using size exclusion chromatography.

**Mouse / 1:1000**

*Annals of neurology* (Aug 2011; 70: 286)

"Application of immunosignatures to the assessment of Alzheimer’s disease."

Author(s):Restrepo L, Stafford P, Magee DM, Johnston SA

PubMed Article URL:http://dx.doi.org/10.1002/ana.22405

**Human / Not Cited**

*Molecular neurobiology* (Sep 2020; 57: 3803)

"The Sigma-2 Receptor/TMEM97, PGRMC1, and LDL Receptor Complex Are Responsible for the Cellular Uptake of A42 and Its Protein Aggregates."

Author(s):Riad A, Lengyel-Zhand Z, Zeng C, Weng CC, Lee VM, Trojanowski JQ, Mach RH

PubMed Article URL:http://dx.doi.org/10.1007/s12035-020-01988-1

AHB0052 was used in Dot blot to aggregate -synuclein in the presence of 4-hydroxynonenal and docosahexaenoic acid, and purify the -synuclein oligomers using size exclusion chromatography.

**Rat / Not Cited**

*The European journal of neuroscience* (Aug 2020; 52: 3242)

"Characterization of a Parkinson’s disease rat model using an upgraded paraquat exposure paradigm."


PubMed Article URL:http://dx.doi.org/10.1111/ejn.14683
AHB0052 was used in immunoprecipitation to study the role of the Reelin pathway in Alzheimer's disease pathogenesis.

**Human / 3 µg/mL**

Nature communications (Mar 2014; 5:)

“Reelin degrades amyloid-beta fibril formation and rescues cognitive deficits in a model of Alzheimer’s disease.”


PubMed Article URL: http://dx.doi.org/10.1038/ncomms4443

**Mouse / 3 µg/mL**

AHB0052 was used in Dot blot to subject APP/presenilin 1 transgenic mice (APP/PS1 Tg) to an extended sequence of repetitive low-level blast exposures (34.5 kPa) administered three times per week over eight weeks.

**Mouse / 1:1500**

Journal of neurotrauma (Nov 2021; 38: 3146)

“Repetitive Low-Level Blast Exposure Improves Behavioral Deficits and Chronically Lower A42 in an Alzheimer Disease Transgenic Mouse Model.”


PubMed Article URL: http://dx.doi.org/10.1089/neu.2021.0184

**Mouse / Not Cited**

Acta neuropathologica communications (Jul 2018; 6:)

“Rac1 activation links tau hyperphosphorylation and A dysmetabolism in Alzheimer’s disease.”


PubMed Article URL: http://dx.doi.org/10.1186/s40478-018-0567-4

**AHB0052 was used in Dot blot to suggest that attenuating tau pathology could mitigate behavioral and molecular hallmarks associated with Huntington’s disease.**

**Mouse / 1:1000**

The Journal of biological chemistry (Oct 2010; 285: 34144)

“ATP-binding cassette transporter A1 mediates the beneficial effects of the liver X receptor agonist GW3965 on object recognition memory and amyloid burden in amyloid precursor protein/presenilin 1 mice.”


PubMed Article URL: http://dx.doi.org/10.1016/j.jbc.2002.01.020

**Mouse / Not Cited**

Molecular therapy : the journal of the American Society of Gene Therapy (Apr 2022; 30: 1500)

“Passive immunization against phosphorylated tau improves features of Huntington’s disease pathology.”

Author(s): Alpaugh M, Masnata M, de Rus Jacquet A, Lepinay E, Denis HL, Saint-Pierre M, Davies P, Pannel E, Cicchetti F

PubMed Article URL: http://dx.doi.org/10.1016/j.mther.2022.01.020

**AHB0052 was used in Dot blot to study neuroinflammation-related gene regulation during normal aging and in sporadic Alzheimer disease in mice**

**Human / 1:1000**

Journal of neuropathology and experimental neurology (Apr 2015; 74: 319)

“Neuroinflammatory signals in Alzheimer disease and APP/PS1 transgenic mice: correlations with plaques, tangles, and oligomeric species.”


PubMed Article URL: http://dx.doi.org/10.1097/NEN.000000000000176

**Human / 5:000**

FEBS letters (Nov 2012; 586: 4088)

“A comparative analysis of the aggregation behavior of amyloid- peptide variants.”


PubMed Article URL: http://dx.doi.org/10.1016/j.febslet.2012.10.022

**AHB0052 was used in Dot blot to suggest that prolonged running may improve memory in preclinical AD via slowing down the amyloid pathology and preventing the loss of synaptic contacts.**

**Mouse / 1:1000**

Aging and disease (Jul 2022; 13: 1293)

“The Effects of Physical Running on Dendritic Spines and Amyloid-beta Pathology in 3xTg-AD Male Mice.”


PubMed Article URL: http://dx.doi.org/10.14336/AD.2022.0110

**AHB0052 was used in Dot Blot to demonstrate the successful application of a bona fide small-molecule amyloid inhibitor as a potent anticancer agent.**

**Mouse / 1:1000**

Nature communications (Jun 2021; 12:)

“Protein mimetic amyloid inhibitor potently abrogates cancer-associated mutant p53 aggregation and restores tumor suppressor function.”


PubMed Article URL: http://dx.doi.org/10.1038/s41467-021-23985-1
AHB0052 was used in Dot blot to develop a method to create monoclonal antibodies that are conformation-sensitive and sequence-independent and can target more than one type of protofibril species.

**Mouse / Not Cited**

Journal of cellular and molecular medicine (Mar 2019; 23: 2103)

"Conformation-specific antibodies against multiple amyloid protofibril species from a single amyloid immunogen."


PubMed Article URL: http://dx.doi.org/10.1111/jccm.14119

**Rat / Not Cited**

The Journal of pharmacology and experimental therapeutics (Oct 2005; 315: 69)

"Dieldrin induces ubiquitin-proteasome dysfunction in alpha-synuclein overexpressing dopaminergic neuronal cells and enhances susceptibility to apoptotic cell death."

Author(s): Sun F, Anantharam V, Latchoumycandane C, Kanthasamy A, Kanthasamy AG

PubMed Article URL: http://dx.doi.org/10.1124/jpet.105.084632

AHB0052 was used in a Dot blot to evaluate the therapeutic potential of AAD-66 for the treatment of Alzheimer's disease.

**Mouse / 1:2,000**

"A guanidine-appended scyllo-inositol derivative AAD-66 enhances brain delivery and ameliorates Alzheimer's phenotypes."


PubMed Article URL: http://dx.doi.org/10.1038/s41598-017-14559-7

**11 Miscellaneous PubMed References**

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / 1:1500</strong></td>
<td>AHB0052 was used in Sample Preparation to test the hypothesis that pneumonia-elicited cytotoxic amyloid and tau variants: (1) are present in the circulation during infection; (2) lead to impairment of long-term potentiation; and, (3) inhibit long-term potentiation dependent upon tau.</td>
</tr>
</tbody>
</table>
| **Rat / 1:1500** | FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Sep 2021; 35: )
"Pneumonia initiates a tauopathy."


PubMed Article URL: http://dx.doi.org/10.1096/fj.202100718R |
| **Human / Not Cited** | The Journal of biological chemistry (Oct 2011; 286: 36086)
"Clustering and internalization of toxic amylin oligomers in pancreatic cells require plasma membrane cholesterol."

Author(s): Trikhia S, Jeremic AM

PubMed Article URL: http://dx.doi.org/10.1074/jbc.M111.240762 |
| **Not Applicable / Not Cited** | Free radical biology & medicine (Jun 2016; 95: 1)
"Redox proteomic profiling of neuroketal-adducted proteins in the human brain increases in the elderly."

Author(s): Dominguez M, de Oliveira E, Odena MA, Porterio M, Pamploira R, Ferrer I

PubMed Article URL: http://dx.doi.org/10.1016/j.freeradbiomed.2016.02.034 |
| **Human / Not Cited** | Neuroscience research (May 2015; 94: 1)
"Carnosic acid attenuates apoptosis induced by amyloid-1-42 or 1-43 in SH-SY5Y human neuroblastoma cells."


PubMed Article URL: http://dx.doi.org/10.1016/j.neures.2014.12.003 |
| **Mouse / Not Cited** | The European journal of neuroscience (Jul 2010; 32: 10)
"Alpha-synuclein mediates alterations in membrane conductance: a potential role for alpha-synuclein oligomers in cell vulnerability."

Author(s): Feng LR, Fedoroff HJ, Vicini S, Maguire-Beizer KA

PubMed Article URL: http://dx.doi.org/10.1111/j.1460-9568.2010.07266.x |
AHB0052 was used in immunocytochemistry to characterize the structure of human islet polypeptide or amylin.

**European journal of medicinal chemistry** (Jun 2014; 81: 442)
"Molecular and cytotoxic properties of hAPP17-29 and rAPP17-29 fragments: a comparative study with the respective full-length parent polypeptides."
Author(s):Tomaseo MF,Sinopoli A,Attanasio F,Giuffrida ML,Campagna T,Milardi D,Pappalardo G
PubMed Article URL:http://dx.doi.org/10.1016/j.ejmech.2014.05.038

**Mouse / Not Cited**

AHB0052 was used in western blot to show that RanBP9 overexpression accelerates loss of synaptic proteins in the murine brain.

PloS one (Sep 2014; 9 )
"RanBP9 overexpression accelerates loss of pre and postsynaptic proteins in the APE9 transgenic mouse brain."
Author(s):Wang H,Wang R,Xu S,Lakshmana MK
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0085484

**Mouse / Not Cited**

AHB0052 was used in Immunopurification to show that prefibrillar huntingtin (HTT) oligomers, isolated from Huntington's disease (HD) affected human brain samples or mouse models, stimulate polyglutamine amyloid formation.

FEBS letters (Jul 2015; 589: 1897)
"Prefibrillar huntingtin oligomers isolated from HD brain potently seed amyloid formation."
Author(s):Morozova OA,Gupta S,Colby DW
PubMed Article URL:http://dx.doi.org/10.1016/j.febslet.2015.05.041

**Human / 1:100**

AHB0052 was used in western blot to study cellular inclusions in the Krabbe brain.

Nature communications (Jan 2021; 12; )
"Plasmonic nanoparticle amyloid corona for screening A amyloid aggregate-degrading drugs."
Author(s):Lee D,Park D,Kim I,Lee SW,Lee W,Hwang KS,Lee JH,lee G,Yoon DS
PubMed Article URL:http://dx.doi.org/10.1038/s41467-020-20611-4

**Human / 1:1000**

AHB0052 was used in Antibody Capture to demonstrate that this strategy with PNAC can identify effective drugs for eliminating oligomeric aggregates.

The Journal of pathology (Apr 2014; 232: 509)
"Neuronal inclusions of -synuclein contribute to the pathogenesis of Krabbe disease."
PubMed Article URL:http://dx.doi.org/10.1002/path.4328

**13 Immunohistochemistry References**

**Species / Dilution**

**Summary**

AHB0052 was used in Immunohistochemistry to characterise fibrillar and oligomeric assemblies in the hearts of idiopathic dilated cardiomyopathy patients.

Circulation (Mar 2010; 121; 1216)
"Protein aggregates and novel presenilin gene variants in idiopathic dilated cardiomyopathy."
PubMed Article URL:http://dx.doi.org/10.1161/CIRCULATIONAHA.109.879510

AHB0052 was used in western blot to show that RanBP9 overexpression accelerates loss of synaptic proteins in the murine brain.

PloS one (Jul 2013; 8: )
"Reduced RAN expression and disrupted transport between cytoplasm and nucleus; a key event in Alzheimer's disease pathophysiology."
Author(s):Mastroeni D,Chouliaras L,Grover A,Liang WS,Hauns K,Rogers J,Coleman PD
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0053349


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.
Mouse / Not Cited

PloS one (Nov 2009; 4 )
“Early-onset and robust amyloid pathology in a new homozygous mouse model of Alzheimer’s disease.”
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0007931

Human / Not Cited

American journal of human genetics (Dec 2006; 79: 1030)
“Mutations of presenilin genes in dilated cardiomyopathy and heart failure.”
Author(s):Li D,Parks SB,Kushner JD,Nauman D,Burgess D,Ludwigsen S,Partain J,Nixon RR,Allen CN,Irwin RP,Jakobs PM,Litt M,Hershberger RE
PubMed Article URL:http://dx.doi.org/10.1086/509900

Mouse / 1:1000

AHB0052 was used in Immunohistochemistry to demonstrate that in vivo systemic administration of secretome collected from MSC exposed in vitro to AD mouse brain homogenates (MSC-CS), fully replicates the cell-mediated neuroreparative effects in APP/PS1 AD mice.

Not Applicable / 1:500

AHB0052 was used in Immunohistochemistry to present findings that support the use of monkeys as a platform to understand age-related vulnerabilities of the primate brain, which may help develop effective disease modifying therapies for treatment of Alzheimer’s disease (AD) and related dementias.

Human / 1:1000

Proceedings of the National Academy of Sciences of the United States of America (Dec 2019; : )
“Oligomeric A in the monkey brain impacts synaptic integrity and induces accelerated cortical aging.”
Author(s):Beckman D,Ot S,Donis-Cox K,Janssen WG,Bliss-Moreau E,Rudebeck PH,Baxter MG,Morrison JH
PubMed Article URL:http://dx.doi.org/10.1073/pnas.1902301116

Mouse / 1:200

AHB0052 was used in Immunohistochemistry to demonstrate that the compound 4-(phenylsulfanyl) butan-2-one (4-PSB-2) is effective in enhancing fear memory retrieval of wild-type and 3xTg-AD mice by reducing the expression of TNF-, COX-2, and iNOS. It also found that 4-PSB-2 helps increase dendritic spine density, postsynaptic density protein-95 (PSD-95) expression, and long-term potentiation (LTP) in the hippocampus of 3xTg-AD mice.

Mouse / 1:100

Nature communications (May 2021; 12: )
“Cardiomyocyte contractile impairment in heart failure results from reduced BAG3-mediated sarcomeric protein turnover.”
Author(s):Martin TG,Myers VD,Dubey P,Dubey S,Perez E,Moravec CS,Willis MS,Feldman AM,Kirk JA
PubMed Article URL:http://dx.doi.org/10.1038/s41467-021-23272-z

Mouse / Not Cited

“Regulation of Synaptic Amyloid- Generation through BACE1 Retrograde Transport in a Mouse Model of Alzheimer’s Disease.”
Author(s):Ye X,Feng T,Tammineni P,Chang Q,Jeong YY,Margolis DJ,Cai H,Kusnecov A,Cai Q
PubMed Article URL:http://dx.doi.org/10.1523/JNEUROSCI.2851-16.2017

Mouse / Not Cited

PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0007931

Mouse / 1:1000

Cell death and differentiation (Jan 2021; 28: 203)
“Intransal delivery of mesenchymal stem cell secretome repairs the brain of Alzheimer’s mice.”
PubMed Article URL:http://dx.doi.org/10.1088/0261-9595/ac0501

Human / 1:1000

Acta neuropathologica communications (Apr 2021; 9: )
“Mixed pathologies in pancreatic cells from subjects with neurodegenerative diseases and their interaction with prion protein.”
Author(s):Martinez-Valbuena I,Valenti-Azzarate R,Armat-Villegas I,Marcella I,Marti-Andres G,Caballero MC,Riverol M,Turton MT,Fraser PE,Luquin MR
PubMed Article URL:http://dx.doi.org/10.1186/s40478-021-01171-0

Mouse / 1:200

Frontiers in aging neuroscience (Feb 2021; 13: )
“The 4-(Phenylsulfanyl) butan-2-one Improves Impaired Fear Memory Retrieval and Reduces Excessive Inflammatory Response in Triple Transgenic Alzheimer’s Disease Mice.”
Author(s):Varinthra P,Ganesan K,Huang SP,Chompoopong S,Eurtivong C,Suresh P,Wen ZH,Liu IY

Mouse / 1:100

AHB0052 was used in Immunohistochemistry to show that the involvement of amylin, pancreatic -synuclein, A, PTP and tau in the complex pathophysiology of type two diabetes and in the appearance of insulin resistance in Alzheimer’s and Parkinson’s disease.

Mouse / 1:200

AHB0052 was used in Immunohistochemistry to indicate BAG3-mediated sarcomere turnover is fundamental for myofilament functional maintenance.

Mouse / Not Cited

The 4-(Phenylsulfanyl) butan-2-one Improves Impaired Fear Memory Retrieval and Reduces Excessive Inflammatory Response in Triple Transgenic Alzheimer’s Disease Mice.
Author(s):Varinthra P,Ganesan K,Huang SP,Chompoopong S,Eurtivong C,Suresh P,Wen ZH,Liu IY

Mouse / Not Cited

Intranasal delivery of mesenchymal stem cell secretome repairs the brain of Alzheimer’s mice.
PubMed Article URL=http://dx.doi.org/10.1088/0261-9595/ac0501


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, it is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.
AHB0052 was used in Immunohistochemistry to propose that it is the extralysosomal glycan that would be harmful to neurons, because its heparan sulfate branches could potentiate the formation of Ptau and beta amyloid aggregates.

Mouse / Not Cited
PloS one (Apr 2012; 6: )
"Defects in the medial entorhinal cortex and dentate gyrus in the mouse model of Sanfilippo syndrome type B."
Author(s):Ohmi K,Zhao HZ,Neufeld EF
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0027461

AHB0052 was used in Immunohistochemistry to show that partial olfactory dysfunction closely associated with peripheral OSN's loss could be a leading cause of AD-related hyposmia, a characteristic of early AD.

Mouse / 1:100
Alzheimer's research & therapy (Jan 2021; 13: )
"Region-specific amyloid- accumulation in the olfactory system influences olfactory sensory neuronal dysfunction in 5xFAD mice."
Author(s):Son G,Yoo SJ,Kang S,Rasheed A,Jung DH,Park H,Cho B,Steinbusch HWM,Chang KA,Suh YH,Moon C

AHB0052 was used in immunohistochemistry to investigate the relationship between beta-amyloid plaques and microglia

Mouse / Not Cited
Nature communications (Jan 2015; 6: )
"Microglia constitute a barrier that prevents neurotoxic protofibrillar A42 hotspots around plaques."
Author(s):Condello C,Yuan P,Schain A,Grutzendorf J
PubMed Article URL:http://dx.doi.org/10.1038/ncomms7176

1 Immunohistochemistry (Frozen) References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable / Not Cited</td>
<td>AHB0052 was used in Immunohistochemistry (Frozen) to provide bioinformatic evidence of dysregulation of mitochondrial and proteostasis pathways in muscle aging and diseases.</td>
</tr>
</tbody>
</table>

Mouse / Not Cited
Cell reports (Jan 2021; 34: )
"NAD<sup>+</sup> boosting reduces age-associated amyloidosis and restores mitochondrial homeostasis in muscle."
Author(s):Romani M,Sorrentino V,Oh CM,Li H,de Lima TL,Zhang H,Shong M,Auwер J
PubMed Article URL:http://dx.doi.org/10.1016/j.celrep.2020.108660

8 Immunocytochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / 1:10,000</td>
<td>AHB0052 was used in immunocytochemistry to test if DT-diaphorase has a protective role in alpha synuclein neurotoxicity</td>
</tr>
</tbody>
</table>

Mouse / Not Cited
PloS one (Jul 2013; 8: )
"Reduced RAN expression and disrupted transport between cytoplasm and nucleus; a key event in Alzheimer's disease pathophysiology."
Author(s):Mastroeni D,Choularias L,Grover A,Liang WS,Hauns K,Rogers J,CoItan PD
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0053349

Human / Not Cited
Toxicological sciences : an official journal of the Society of Toxicology (May 2015; 145: 37)
"DT-Diaphorase Prevents Aminochrome-Induced Alpha-Synuclein Oligomer Formation and Neurotoxicity."
PubMed Article URL:http://dx.doi.org/10.1093/toxsci/kfv016

Rat / 1:1,000
AHB0052 was used in Immunocytochemistry to develop an SH-SY5Y line harbouring Tet-ON SNCA cDNA cassette that allows for induction of controlled -synuclein expression after neuronal differentiation.

Human / Not Cited
"An Inducible Alpha-Synuclein Expressing Neuronal Cell Line Model for Parkinson's Disease1."
Author(s):Vasquez V,Mitra J,Perry G,Rao KS,Heegde ML
PubMed Article URL:http://dx.doi.org/10.3233/JAD-180610


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts (“Documentation”). No claim of suitability for use in applications regulated by FDA is made. The warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. No other warranties, express or implied, are granted including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyers exclusive remedy for non-conforming products is the right to repair, replace or refund for products as the result of (i) Accident, (ii) Manufacturer's, (iii) Misuse, Fault or negligence of or by Buyer, (iv) Use of the products in a manner for which they were not designed, or (v) Improper storage or handling of the products. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.
AHB0052 was used in Immunocytochemistry to demonstrate the rapid capture of oA42 by MSB under magnetic stirring and its potential for AD treatment.

Mouse / Not Cited

Nanomaterials (Basel, Switzerland) (Jun 2020; 10: )

"Capturing Amyloid- Oligomers by Stirring with Microscaled Iron Oxide Stir Bars into Magnetic Plaques to Reduce Cytotoxicity toward Neuronal Cells."

Author(s): Tsai YC,Luo J,C,Liu TI,Lu IL,Shen MY,Chuang CY,Chern GS,Chiu HC

PubMed Article URL:http://dx.doi.org/10.3390/nano10071284

AHB0052 was used in Immunocytochemistry-immunofluorescence to demonstrate that persistent assembly of stress granules is cytotoxic and is accompanied by the evolution of SGs to cytoplasmic inclusions that recapitulate the pathology of amyotrophic lateral sclerosis-frontotemporal dementia.

Human / 1:100

eLife (Mar 2019; 8: )

"Chronic optogenetic induction of stress granules is cytotoxic and reveals the evolution of ALS-FTD pathology."  


PubMed Article URL:http://dx.doi.org/10.7554/eLife.39578

AHB0052 was used in Immunocytochemistry-immunofluorescence to identify a neuronal cell death mechanism that can be initiated by transient-stress-induced cytosolic de-mixing of TDP-43.

Mouse / 1:500

Neuron (Apr 2019; 102: 339)

"Cytoplasmic TDP-43 De-mixing Independent of Stress Granules Drives Inhibition of Nuclear Import, Loss of Nuclear TDP-43, and Cell Death."

Author(s): Gasset-Rosa F,Lu S,Yu H,Chen C,Melamed Z,Guo L,Shorter J,da Cruz S,Cleveland DW

PubMed Article URL:http://dx.doi.org/10.1016/j.neuron.2019.02.038

AHB0052 was used in Immunocytochemistry to assess reduction of pyramidal cell excitability due to intracellular soluble alpha-synuclein oligomers.

Not Applicable / Not Cited

The Journal of physiology (May 2016; 594: 2751)

"Intracellular soluble-synuclein oligomers reduce pyramidal cell excitability."

Author(s): Kaufmann TJ,Harrison PM,Richardson MJ,Pinheiro TJ,Wall MJ

PubMed Article URL:http://dx.doi.org/10.1113/JP271968

1 Flow Cytometry References

Species / Dilution

Summary

AHB0052 was used in Flow cytometry/Cell sorting to identify a variant, which we designated HTB1M3 , that bound strongly to SOD1 misfolded mutants but not to wild-type SOD1.

Human / Not Cited

Proteins (Sep 2019; 87: 738)

"A hyperthermophilic protein G variant engineered via directed evolution prevents the formation of toxic SOD1 oligomers."

Author(s): Dagan B,Oren O,Banerjee V,Taube R,Papo N

PubMed Article URL:http://dx.doi.org/10.1002/prot.25700

2 Immunoprecipitation References

Species / Dilution

Summary

AHB0052 was used in Immunoprecipitation to suggest that insulin retention in hyperphosphorylated tau-bearing neurons is a causative factor for the insulin resistance observed in tauopathies, and describe a novel neuropathological concept with important therapeutic implications.

Human / Not Cited

Brain : a journal of neurology (Dec 2017; 140: 3269)

"Tau hyperphosphorylation induces oligomeric insulin accumulation and insulin resistance in neurons."


PubMed Article URL:http://dx.doi.org/10.1038/brainawx256

AHB0052 was used in immunohistochemistry - frozen section and immunoprecipitation to investigate the role of Fbox2 in regulating NMDAR subunits in the brain.

Mouse / 1:500


"Loss of F-box only protein 2 (Fbox2) disrupts levels and localization of select NMDA receptor subunits, and promotes aberrant synaptic connectivity."


PubMed Article URL:http://dx.doi.org/10.1523/JNEUROSCI.3013-14.2015

1 Neutralization References

Species / Dilution

Summary

AHB0052 was used in Immunocytochemistry-immunofluorescence to suggest that insulin retention in hyperphosphorylated tau-bearing neurons is a causative factor for the insulin resistance observed in tauopathies, and describe a novel neuropathological concept with important therapeutic implications.


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty, provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, the warranty is limited to one year from date of shipment when the Product is subjected to normal and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer for Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS EITHER REPAIR, REPLACEMENT OR REFUND FOR THE NON-CONFORMINGPRODUCTS AT SELLER'S SOLE OPTION. THERE IS NO LIABILITY FOR ANY OTHER DAMAGE OR LOSS OR CONSEQUENCES OF ANY SORT INCLUDING WITHOUT LIMITATION, TERRORS, SOFTWARE, DATA, LOSS OF PROFITS OR INCOME, OR OTHER SPECIAL, ACCIDENTAL OR INDIRECT DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OF ANY SORT OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMAGES OR LOSS OR CONSEQUENTIAL DAMA
AHB0052 was used in Immunodepletion to suggest that the pathologic and clinical alterations of type-2 diabetes may be transmissible through mechanism similar to prion disease propagation.

The Journal of experimental medicine (Sep 2017; 214: 2591)
"Induction of IAPP amyloid deposition and associated diabetic abnormalities by a prion-like mechanism."
Author(s): Mukherjee A, Morales-Scheiring D, Salvador N, Moreno-Gonzalez I, Gonzalez C, Taylor-Presse K, Mendez N, Shahnawaz M, Gaber AO, Sabek OM, Fraga DW, Soto C
PubMed Article URL: http://dx.doi.org/10.1084/jem.20161134

### 1 Immunohistochemistry - Free Floating References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse / 1:50</td>
<td>AHB0052 was used in immunohistochemistry - free floating to examine the Reelin accumulation of Reelin in amyloid-like deposits during ageing.</td>
</tr>
</tbody>
</table>

**Neurobiology of aging** (May 2009; 30: 697)
"Age-related accumulation of Reelin in amyloid-like deposits."
PubMed Article URL: http://dx.doi.org/10.1016/j.neurobiolaging.2007.08.011