

Amyloid Precursor Protein Monoclonal Antibody (mAbP2-1)

Product Details	
Size	50 µg
Species Reactivity	Human, Non-human primate
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	mAbP2-1
Conjugate	Unconjugated
Immunogen	Native, secreted form of APP
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4
Contains	no preservative
Storage conditions	-80° C, Avoid Freeze/Thaw Cycles
RRID	AB_325526

Applications	Tested Dilution	Publications
Western Blot (WB)	5 µg/mL	3 Publications
Immunocytochemistry (ICC/IF)	1:200	1 Publication
ELISA (ELISA)	10 µg/mL	6 Publications
Immunoprecipitation (IP)	25 µg/mL*	1 Publication

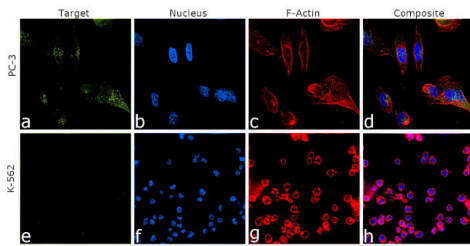
Product Specific Information

OMA1-03132 detects amyloid precursor protein (APP) from human and monkey tissues. This antibody is specific for native, non-denatured protein, and does not cross-react with mouse, rat APP or other APP homologs.

OMA1-03132 has been successfully used in Western blot (non-reducing conditions), immunocytochemistry, immunoprecipitation and ELISA procedures. This antibody does not work in in IHC on paraffin embedded tissues nor does it recognize APP if the samples are boiled in Laemmli (SDS) sample buffer containing a reducing agent such as DTT or β-ME. Can be used in immunoprecipitation utilizing 25 µg/mL of OMA1-03132 linked sepharose.

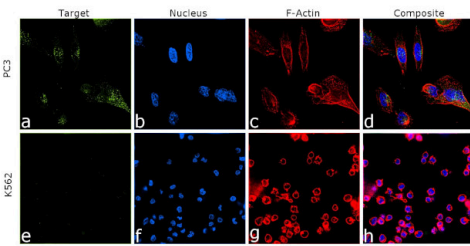
OMA1-03132 antigen is the native, secreted form of human APP. The epitope recognized by OMA1-03132 maps to residues 104-118 of APP

Product Images For Amyloid Precursor Protein Monoclonal Antibody (mAbP2-1)



Amyloid Precursor Protein Antibody (OMA1-03132)

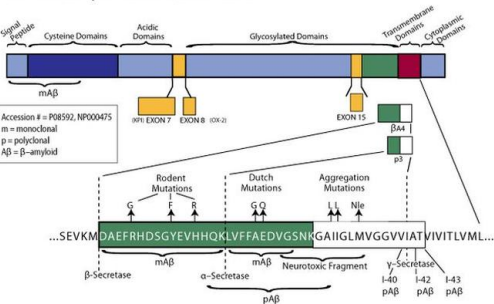
Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Immunofluorescence analysis using Anti-Amyloid Precursor Protein Monoclonal Antibody (mAbP2-1) (Product # OMA1-03132), showed expression only in PC-3 in comparison to K-562. {RE}



Amyloid Precursor Protein Antibody (OMA1-03132) in ICC/IF

Immunofluorescence analysis of Amyloid Precursor Protein was performed using 70% confluent log phase PC-3 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Amyloid Precursor Protein Monoclonal Antibody (mAbP2-1) (Product # OMA1-03132) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing Golgi apparatus and vesicles localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60 magnification.

APP and Aβ Protein Schematic



Amyloid Precursor Protein Antibody (OMA1-03132)

Amyloid Beta Protein Schematic

View more figures on thermofisher.com

11 References

Western Blot (3)

Cell systems

Pulse-Chase Proteomics of the App Knockin Mouse Models of Alzheimer's Disease Reveals that Synaptic Dysfunction Originates in Presynaptic Terminals.

"OMA1-03132 was used in Western Blotting to observe protein turnover at early stages of amyloid beta (A) proteotoxicity."

Authors: Hark TJ,Rao NR,Castillon C,Basta T,Smukowski S,Bao H,Upadhyay A,Bomba-Warczak E,Nomura T,O'Toole ET,Morgan GP,Ali L,Saito T,Guillermier C,Saido TC,Steinhauser ML,Stowell MHB,Chapman ER,Contractor A,Savas JN

Year
2021

Species
Mouse

Molecular neurodegeneration

A accumulation causes MVB enlargement and is modelled by dominant negative VPS4A.

"Published figure using Amyloid Precursor Protein monoclonal antibody (Product # OMA1-03132) in Immunofluorescence"

Authors: Willén K,Edgar JR,Hasegawa T,Tanaka N,Futter CE,Gouras GK

Year
2017

Species
Mouse

[View more WB references on thermofisher.com](#)

Immunocytochemistry (1)

Molecular neurodegeneration

A accumulation causes MVB enlargement and is modelled by dominant negative VPS4A.

"Published figure using Amyloid Precursor Protein monoclonal antibody (Product # OMA1-03132) in Immunofluorescence"

Authors: Willén K,Edgar JR,Hasegawa T,Tanaka N,Futter CE,Gouras GK

Year
2017

Species
Mouse

ELISA (6)

Journal of medicinal chemistry

Aminomethyl-Derived Beta Secretase (BACE1) Inhibitors: Engaging Gly230 without an Anilide Functionality.

"OMA103132 was used in ELISA to describe an alternative aminomethyl linker for beta-secretase inhibitors that with potency similar to the current anilide moiety and improves brain penetration"

Authors: Butler CR,Ogilvie K,Martinez-Alsina L,Barreiro G,Beck EM,Nolan CE,Atchison K,Benvenuti E,Buzon L,Doran S,Gonzales C,Helal CJ,Hou X,Hsu MH,Johnson EF,Lapham K,Lanyon L,Parris K,O'Neill BT,Riddell D,Robshaw A,Vajdos F,Brodney MA

Year
2017

Species
Human

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More applications with references on thermofisher.com

IP (1)

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