PMEL Monoclonal Antibody (HMB45)

Catalog Number MA5-13232

**Details**

- **Size**: 500 µL
- **Host/Isotope**: Mouse / IgG1, kappa
- **Class**: Monoclonal
- **Type**: Antibody
- **Clone**: HMB45
- **Immunogen**: Extract of pigmented melanoma metastases from lymph nodes
- **Conjugate**: Unconjugated
- **Form**: Liquid
- **Concentration**: Conc. Not Determined
- **Storage buffer**: tissue culture supernatant
- **Contains**: 0.09% sodium azide
- **Storage Conditions**: 4° C

**Species Reactivity**

- **Species reactivity**: Human
- **Published species**: Bovine, Human, Mouse, Not Applicable

**Tested Applications**

- **Immunohistochemistry (Paraffin) (IHC (P))**: Dilution 1:40-1:80
- **Western Blot (WB)**: Dilution 1:50

**Published Applications**

- **Western Blot (WB)**: See 4 publications below
- **Immunocytochemistry (ICC/IF)**: See 11 publications below
- **Immunohistochemistry (Frozen) (IHC (F))**: See 1 publications below
- **Miscellaneous PubMed (Misc)**: See 1 publications below
- **Flow Cytometry (Flow)**: See 2 publications below
- **Immunohistochemistry (IHC)**: See 16 publications below
- **Immunohistochemistry (Paraffin) (IHC (P))**: See 1 publications below
- **Neutralization (Neu)**: See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

**Product specific information**

MA5-13232 targets Melanoma (gp100) in IHC (P) and WB applications and shows reactivity with Human samples. The MA5-13232 immunogen is extract of pigmented melanoma metastases from lymph nodes.

**Background/Target Information**

Melanoma is a malignant tumor of melanocytes which are found predominantly in skin but also in the bowel and the eye (see uveal melanoma). It is one of the rarer types of skin cancer but causes the majority of skin cancer related deaths.


---


Products are warranted to operate or perform substantially in conformance with published specifications in effect at the time of sale, as set forth in the Documentation, specifications and/or accompanying package inserts (“Documentation”). Any 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 stored in 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. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND 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 vivo diagnostic uses, as any or in vivo therapeutic uses, or any type of consumption by or application to human or animals.


---

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus
PMEL Antibody (MA5-13232) in IHC (P)
Formalin-fixed, paraffin-embedded human melanoma stained with Melanoma antibody using peroxidase-conjugate and AEC chromogen. Note cytoplasmic staining of tumor cells.

PMEL Antibody (MA5-13232) in WB
Western blot of Melanoma (gp100) using Melanoma (gp100) Monoclonal Antibody (Product # MA5-13232) on 501mel Cells.
PubMed References For PMEL Monoclonal Antibody (HMB45)

### 4 Western Blot References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / Not Cited</strong></td>
<td>MA5-13232 was used in western blot to investigate the role of PMEL mutations in physiological and pathological amyloid fibril formation. PLoS genetics (Sep 2011; 7: ). &quot;Mutations in or near the transmembrane domain alter PMEL amyloid formation from functional to pathogenic.&quot; Author(s): Watt B, Tenza D, Lemmon MA, Kerje S, Raposo G, Andersson L, Marks MS. PubMed Article URL: <a href="http://dx.doi.org/10.1371/journal.pgen.1002286">http://dx.doi.org/10.1371/journal.pgen.1002286</a>.</td>
</tr>
<tr>
<td><strong>Human / 1:500</strong></td>
<td>MA5-13232 was used in western blot to study the behavior and functional abilities of melanocytes expressing MC1R red hair color variants. Journal of cellular physiology (May 2008; 215: 344). &quot;Melanocytes expressing MC1R polymorphisms associated with red hair color have altered MSH-ligand activated pigmentary responses in coculture with keratinocytes.&quot; Author(s): Roberts DW, Newton RA, Leonard JH, Sturm RA. PubMed Article URL: <a href="http://dx.doi.org/10.1002/jcp.21318">http://dx.doi.org/10.1002/jcp.21318</a>.</td>
</tr>
</tbody>
</table>

### 11 Immunocytochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / 1:200</strong></td>
<td>MA5-13232 was used in Immunocytochemistry-immunofluorescence to study the pathogenesis of Oculocutaneous albinism (OCA) type 6. Journal of cell science (Jul 2019; 132: ). &quot;Mitochondrial NCKX5 regulates melanosomal biogenesis and pigment production.&quot; Author(s): Zhang Z, Gong J, Sviderskaya EV, Wei A, Li W. PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.232009">http://dx.doi.org/10.1242/jcs.232009</a>.</td>
</tr>
<tr>
<td><strong>Human / Not Cited</strong></td>
<td>MA5-13232 was used in immunocytochemistry to investigate the role of proprotein convertase cleavage in melanosome biogenesis. The Journal of cell biology (May 2003; 161: 521). &quot;Proprotein convertase cleavage liberates a fibrillogenic fragment of a resident glycoprotein to initiate melanosomal biogenesis.&quot; Author(s): Berson JF, Theos AC, Harper DC, Tenza D, Raposo G, Marks MS. PubMed Article URL: <a href="http://dx.doi.org/10.1083/jcb.200302072">http://dx.doi.org/10.1083/jcb.200302072</a>.</td>
</tr>
</tbody>
</table>
MA5-13232 was used in immunocytochemistry to study the delivery of OCA2 to melanosomes and the distinct roles played by AP-1 and AP-3.

Mouse / Not Cited

Molecular biology of the cell (Aug 2012; 23: 3178)
"Differential recognition of a dileucine-based sorting signal by AP-1 and AP-3 reveals a requirement for both BLOC-1 and AP-3 in delivery of OCA2 to melanosomes."
PubMed Article URL: http://dx.doi.org/10.1016/j.mcb.2011.06.0509

Thermo Fisher Scientific 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.

NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER ... stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and

IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO ... REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, ... PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD

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.

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 correctly supplied by and installed by Thermo Fisher Scientific. In no event shall Thermo Fisher Scientific be liable for any indirect, incidental, or consequential damages, including, but not limited to, loss of data, lost profits, or any other type of damages arising in any way out of the use of the Product or any part thereof, even if Thermo Fisher Scientific is advised of the possibility of such damages. No other warranties, express or implied, are granted by Thermo Fisher Scientific. A description of the Product and its intended use is provided in the Documentation. The Warranty Period is limited to one year from date of shipment when the Product is shipped to a domestic, properly trained, and approved end user. Thermo Fisher Scientific shall not be responsible for any claim by a third party resulting from any use of the Product by its end user. The Warranty Period is limited to one year from date of shipment when the Product is shipped to a domestic, properly trained, and approved end user. Thermo Fisher Scientific shall not be responsible for any claim by a third party resulting from any use of the Product by its end user.


MA5-13232 was used in immunocytochemistry and western blot to study Pmel17 processing in melanocytes.

Not Applicable / Not Cited

The Journal of biological chemistry (Mar 2011; 286: 9321)
"Proprotein convertases process Pmel17 during secretion."
Author(s): Leonhardt RM, Vignon R, Rahner C, Cresswell P
PubMed Article URL: http://dx.doi.org/10.1074/jbc.M110.168088

MA5-13232 was used in immunocytochemistry to propose that VAMP7 mediates fusion of BLOC-1-dependent transport carriers with melanosomes.

Mouse / Not Cited

The Journal of cell biology (Aug 2016; 214: 293)
"BLOC-1 and BLOC-3 regulate VAMP7 cycling to and from melanosomes via distinct tubular transport carriers."
Author(s): Dennis MK, Delevoye C, Acosta-Ruiz A, Hubain I, Romao M, Hesketh GG, Goff PS, Sviderskaya EV, Bennett DC, Luzio JP, Galli T, Owen DJ, Raposo G, Marks MS
PubMed Article URL: http://dx.doi.org/10.1083/jcb.201605090

MA5-13232 was used in immunocytochemistry to confirm the diagnostic value of endoscopic ultrasound-guided fine-needle aspiration.

Human / 1:800

Cancer cytopathology (Feb 2011; 119: 37)
"Endoscopic ultrasound-guided fine-needle aspiration of intrathoracic and intra-abdominal spindle cell and mesenchymal lesions."
Author(s): Bean SM, Baker A, Eloubeidi M, Eltoum I, Jhala N, Crowe R, Jhala D, Chhieng DC
PubMed Article URL: http://dx.doi.org/10.1002/cncy.20120

MA5-13232 was used in immunocytochemistry to investigate the role of Rab27A specific mutation in Griscelli syndrome.

Human / 1:100

Molecular genetics and metabolism (Jun 2008; 94: 248)
"A novel missense mutation (G43S) in the switch I region of Rab27A causing Griscelli syndrome."
PubMed Article URL: http://dx.doi.org/10.1016/j.ymgme.2008.02.009

MA5-13232 was used in immunocytochemistry to report on new cases of Griscelli syndrome type III.

Human / 1:300

Pigment cell & melanoma research (Jan 2012; 25: 47)
"Cellular and clinical report of new Griscelli syndrome type III cases."
PubMed Article URL: http://dx.doi.org/10.1111/j.1755-148X.2011.00901.x

MA5-13232 was used in immunocytochemistry to study the trafficking of melanocyte-specific proteins in Hermansky-Pudlak syndrome type-5 melanocytes.

Human / 1:200

The Journal of investigative dermatology (Jun 2007; 127: 1471)
"Improper trafficking of melanocyte-specific proteins in Hermansky-Pudlak syndrome type-5."
Author(s): Helip-Wooley A, Westbroek W, Dorward HM, Koshofer A, Huizing M, Boissy RE, Gahl WA
PubMed Article URL: http://dx.doi.org/10.1038/jid.2006.221

MA5-13232 was used in immunocytochemistry to study the clinical and cellular characteristics of Hermansky-Pudlak syndrome subtype 6.

Human / 1:200

Journal of medical genetics (Dec 2009; 46: 803)
"Clinical and cellular characterisation of Hermansky-Pudlak syndrome type 6."
PubMed Article URL: http://dx.doi.org/10.1136/jmg.2008.065961

1 Immunohistochemistry (Frozen) References

Species / Dilution

Summary

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to study the delivery of OCA2 to melanosomes and the distinct roles played by AP-1 and AP-3.</td>
</tr>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to investigate the role of Rab27A specific mutation in Griscelli syndrome.</td>
</tr>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to confirm the diagnostic value of endoscopic ultrasound-guided fine-needle aspiration.</td>
</tr>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to report on new cases of Griscelli syndrome type III.</td>
</tr>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to study the trafficking of melanocyte-specific proteins in Hermansky-Pudlak syndrome type-5 melanocytes.</td>
</tr>
<tr>
<td>Human</td>
<td>MA5-13232 was used in immunocytochemistry to study the clinical and cellular characteristics of Hermansky-Pudlak syndrome subtype 6.</td>
</tr>
</tbody>
</table>
MA513232 was used in immunohistochemistry - frozen section to investigate the role of natural killer cells to lymphangioleiomyomatosis pathogenesis

**1 Miscellaneous PubMed References**

**Species / Dilution**

**Summary**

Human / 1:150

JCI insight (Oct 2016; 1: )

"NK cell activating receptor ligand expression in lymphangioleiomyomatosis is associated with lung function decline."


PubMed Article URL:http://dx.doi.org/10.1172/jci.insight.87270

**Human / 1:80**

Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (May 2016; 56: 817)

"A challenging case of ocular melanoma."


**2 Flow Cytometry References**

**Species / Dilution**

**Summary**

Human / Not Cited

MA5-13232 was used in flow cytometry to examine the allogenic glioma cells for the generation of therapeutic vaccines or cellular therapy

Clinical research : an official journal of the American Association for Cancer Research (Jan 2007; 13: 566)

"Antigenic profiling of glioma cells to generate allogeneic vaccines or dendritic cell-based therapeutics."


PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-06-1576

Mouse / Not Cited


"BLOC-2 targets recycling endosomal tubules to melanosomes for cargo delivery."


PubMed Article URL:http://dx.doi.org/10.1083/jcb.201410026

**16 Immunohistochemistry References**

**Species / Dilution**

**Summary**

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study patterns of repigmentation in two cases of hypopigmented type of vitiligo

Photodermatology, photoimmunology & photomedicine (Jun 2009; 25: 156)

"Patterns of repigmentation in two cases of hypopigmented type of vitiligo."

Author(s):Anbar TS, El-Sawy AE, Attia SK, Moftah NH, El-Tonsy MH

PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0781.2009.00423.x

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study the effects of PUVA treatment on melanocytes and keratinocytes from patients with non-segmental vitiligo

Photodermatology, photoimmunology & photomedicine (Feb 2012; 28: 17)

"Effect of PUVA therapy on melanocytes and keratinocytes in non-segmental vitiligo: histopathological, immunohistochemical and ultrastructural study."

Author(s):Anbar TS, El-Sawy AE, Attia SK, Barakat MT, Moftah NH, El-Ammawy SS, Abdel-Rahman AT, El-Tonsy MH

PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0781.2011.00631.x

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study the correlation between cellular defects, genotype and clinical phenotype in Chediak-Higashi syndrome

The Journal of investigative dermatology (Nov 2007; 127: 2674)

"Cellular defects in Chediak-Higashi syndrome correlate with the molecular genotype and clinical phenotype."


PubMed Article URL:http://dx.doi.org/10.1083/jid.2007127.2674

**22 Flow Cytometry References**

**Species / Dilution**

**Summary**

Human / Not Cited

MA5-13232 was used in flow cytometry to examine the allogenic glioma cells for the generation of therapeutic vaccines or cellular therapy

Clinical research : an official journal of the American Association for Cancer Research (Jan 2007; 13: 566)

"Antigenic profiling of glioma cells to generate allogeneic vaccines or dendritic cell-based therapeutics."


PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-06-1576

Mouse / Not Cited


"BLOC-2 targets recycling endosomal tubules to melanosomes for cargo delivery."


PubMed Article URL:http://dx.doi.org/10.1083/jcb.201410026

**16 Immunohistochemistry References**

**Species / Dilution**

**Summary**

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study patterns of repigmentation in two cases of hypopigmented type of vitiligo

Photodermatology, photoimmunology & photomedicine (Jun 2009; 25: 156)

"Patterns of repigmentation in two cases of hypopigmented type of vitiligo."

Author(s):Anbar TS, El-Sawy AE, Attia SK, Moftah NH, El-Tonsy MH

PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0781.2009.00423.x

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study the effects of PUVA treatment on melanocytes and keratinocytes from patients with non-segmental vitiligo

Photodermatology, photoimmunology & photomedicine (Feb 2012; 28: 17)

"Effect of PUVA therapy on melanocytes and keratinocytes in non-segmental vitiligo: histopathological, immunohistochemical and ultrastructural study."

Author(s):Anbar TS, El-Sawy AE, Attia SK, Barakat MT, Moftah NH, El-Ammawy SS, Abdel-Rahman AT, El-Tonsy MH

PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0781.2011.00631.x

Human / Not Cited

MA5-13232 was used in immunohistochemistry to study the correlation between cellular defects, genotype and clinical phenotype in Chediak-Higashi syndrome

The Journal of investigative dermatology (Nov 2007; 127: 2674)

"Cellular defects in Chediak-Higashi syndrome correlate with the molecular genotype and clinical phenotype."


PubMed Article URL:http://dx.doi.org/10.1083/jid.2007127.2674
MA5-13232 was used in immunohistochemistry to investigate the differentiating features between primary melanoma and its cutaneous metastasis

Human / Not Cited

Romanian journal of internal medicine = Revue roumaine de medicine interne (Jun 2009; 46: 375)
"Cutaneous metastases of malignant melanoma--how difficult can it be?"

MA5-13232 was used in immunohistochemistry to investigate the level of CD1a in uterine epithelioid smooth muscle tumors

Human / Not Cited

Annals of diagnostic pathology (Dec 2008; 12: 401)
"Epithelioid smooth muscle tumors of the uterus do not express CD1a: a potential immunohistochemical adjunct in their distinction from uterine perivascular epithelioid cell tumors."
Author(s):Fadare O,Liang SX
PubMed Article URL:http://dx.doi.org/10.1016/j.andpath.2008.04.009

MA5-13232 was used in immunohistochemistry to identify the proton pump on immature melanosomes as the vacuolar H(+) - ATPase a3 isoform

Mouse / Not Cited

Cell and tissue research (Jun 2008; 332: 447)
"Vacular-type H(+) -ATPase with the a3 isoform is the proton pump on prematatur melanosomes."
Author(s):Tabata H,Kawamura N,Sun-Wada GH,Wada Y
PubMed Article URL:http://dx.doi.org/10.1007/s00441-008-0597-5

MA5-13232 was used in immunohistochemistry to investigate histological features in a Holstein heifer with melanosis

Bovine / Not Cited

"Melanos in a Holstein heifer."
Author(s):Churg E
PubMed Article URL:http://dx.doi.org/10.1111/j.1439-0442.2007.00954.x

MA5-13232 was used in immunohistochemistry to report on a case of sporadic haemangioblastoma of the kidney with rhabdoid features and focal CD10 expression

Human / 1:50

Diagnostic pathology (Apr 2012; 7: )
"Sporadic haemangioblastoma of the kidney with rhabdoid features and focal CD10 expression: report of a case and literature review."
Author(s):Yin WH, Li J, Chan J K
PubMed Article URL:http://dx.doi.org/10.1186/1746-1596-7-39

MA5-13232 was used in immunohistochemistry to investigate specific CD8+ tissue-infiltrating T cells in a patient with melanoma

Human / Not Cited

Melanoma research (Apr 2006; 16: 165)
"Accumulation of low-avidity anti-melanocortin receptor 1 (anti-MC1R) CD8+ T cells in the lesional skin of a patient with melanoma-related depigmentation."
Author(s):Wankowicz-Kalinska A,Maillard RB,Olson K,Graham F,Edington H,Kirkwood JM,Martinek S,Das PK,Storkus WJ
PubMed Article URL:http://dx.doi.org/10.1097/01.cmr.0000198452.03957.73

MA5-13232 was used in immunohistochemistry to study the effects of targeting BRAF(V600E) on melanoma growth in an inducible murine model

Mouse / 1:1000

The American journal of pathology (Sep 2012; 181: 785)
"Targeting BRAF(V600E) in an inducible murine model of melanoma."
Author(s):Hooijaaka A, Gadiot J,van der Valk M,Mooi WJ,Blank CU
PubMed Article URL:http://dx.doi.org/10.1016/j.ajpath.2012.06.002

MA5-13232 was used in immunohistochemistry to report on a case of primary myoepithelial carcinoma of the larynx

Human / 1:100

Pathology, research and practice (Feb 2011; 207: 127)
"Primary myoepithelial carcinoma of the larynx: case report and review of the literature."
Author(s):Yu Q,G.Kong L,Pan X,Wang W,Lv J
PubMed Article URL:http://dx.doi.org/10.1016/j.prp.2010.10.006

MA5-13232 was used in immunohistochemistry to study pulmonary meningothelial-like nodules

Human / Not Cited

The American journal of surgical pathology (Apr 2009; 33: 487)
"Pulmonary meningothelial-like nodules: new insights into a common but poorly understood entity."
Author(s):Mukhopadhyay S,El-Zammar OA,Katzenstein AL
PubMed Article URL:http://dx.doi.org/10.1097/PAS.0b013e3181b1de7
<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-13232 was used in immunohistochemistry to study the role of SOX18 function in tumor lymphangiogenesis and metastasis of melanoma in mice</td>
</tr>
<tr>
<td>Human / 1:200</td>
<td>Cancer research (Jun 2012; 72: 3105)</td>
</tr>
<tr>
<td>&quot;Genetic ablation of SOX18 function suppresses tumor lymphangiogenesis and metastasis of melanoma in mice.&quot;</td>
<td></td>
</tr>
<tr>
<td>Author(s): Duong T, Proulx ST, Luciani P, Leroux JC, Detmar M, Koopman P, Francois M</td>
<td></td>
</tr>
<tr>
<td>PubMed Article URL: <a href="http://dx.doi.org/10.1097/PGP.0b013e318290407c">http://dx.doi.org/10.1097/PGP.0b013e318290407c</a></td>
<td></td>
</tr>
<tr>
<td>&quot;Microscopic uterine lymphangioliomyomatosis perivascular epithelioid cell neoplasm: a case report with the earliest manifestation of this enigmatic neoplasm.&quot;</td>
<td></td>
</tr>
<tr>
<td>Author(s): Clay MR, Gibson P, Lowell J, Cooper K</td>
<td></td>
</tr>
<tr>
<td>PubMed Article URL: <a href="http://dx.doi.org/10.1097/PGP.0b013e3181efe08d">http://dx.doi.org/10.1097/PGP.0b013e3181efe08d</a></td>
<td></td>
</tr>
</tbody>
</table>

**1 Immunohistochemistry (Paraffin) References**

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-13232 was used in immunohistochemistry - paraffin section to present two cases of epithelioid PEComas</td>
</tr>
<tr>
<td>Not Applicable / 1:40</td>
<td>Case reports in medicine (Sep 2012; 2012: )</td>
</tr>
<tr>
<td>&quot;Cardiac Epithelioid PEComa: Report of Two Cases and Review of the Literature.&quot;</td>
<td></td>
</tr>
<tr>
<td>Author(s): Niu H, Wang FW, Zhang PJ, Bing Z</td>
<td></td>
</tr>
<tr>
<td>PubMed Article URL: <a href="http://dx.doi.org/10.1155/2012/521678">http://dx.doi.org/10.1155/2012/521678</a></td>
<td></td>
</tr>
</tbody>
</table>

**1 Neutralization References**

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-13232 was used in blocking or activating experiment to study the T cell immune response against melanoma elicited through conjugation of melanoma antigen with mannose receptor antibody</td>
</tr>
<tr>
<td>Author(s): Ramakrishna V, Tremi JF, Vitale L, Connolly JE, O'Neill T, Smith PA, Jones CL, He L, Z Goldstein J, Wallace PK, Keler T, Endres MJ</td>
<td></td>
</tr>
<tr>
<td>PubMed Article URL: <a href="http://dx.doi.org/10.4049/jimmunol.172.5.2845">http://dx.doi.org/10.4049/jimmunol.172.5.2845</a></td>
<td></td>
</tr>
</tbody>
</table>