Melan-A Monoclonal Antibody (M2-7C10)

Catalog Number MA5-15237

Details

<table>
<thead>
<tr>
<th>Size</th>
<th>500 µL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host/Isotope</td>
<td>Mouse / IgG2b, kappa</td>
</tr>
<tr>
<td>Class</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Type</td>
<td>Antibody</td>
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<tr>
<td>Clone</td>
<td>M2-7C10</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant hMART-1 protein</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Unconjugated</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
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<tr>
<td>Concentration</td>
<td>0.1 mg/mL</td>
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<tr>
<td>Purification</td>
<td>Protein A</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>PBS, pH 7.4, with 0.2% BSA</td>
</tr>
<tr>
<td>Contains</td>
<td>0.09% sodium azide</td>
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<tr>
<td>Storage Conditions</td>
<td>4° C</td>
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Species Reactivity

<table>
<thead>
<tr>
<th>Species reactivity</th>
<th>Human</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published species</td>
<td>Rat, Non-human primate, Human, Mouse</td>
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Tested Applications

<table>
<thead>
<tr>
<th>Dilution *</th>
<th>Flow Cytometry (Flow)</th>
<th>1:100 - 1:200</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immunohistochemistry (Paraffin) (IHC (P))</td>
<td>1:100 - 1:200</td>
</tr>
<tr>
<td></td>
<td>Immunoprecipitation (IP)</td>
<td>1:50</td>
</tr>
<tr>
<td></td>
<td>Western Blot (WB)</td>
<td>1:50 - 1:100</td>
</tr>
</tbody>
</table>

Published Applications

- Immunohistochemistry (IHC): See 14 publications below
- Flow Cytometry (Flow): See 1 publications below
- Western Blot (WB): See 5 publications below
- Immunocytochemistry (ICC/IF): See 1 publications below
- Immunoprecipitation (IP): 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

MA5-15237 targets MART-1 in FACS, IHC (P), IP, and WB applications and shows reactivity with Human samples. The MA5-15237 immunogen is recombinant hMART-1 protein.

Background/Target Information

MART1 is involved in melanosome biogenesis by ensuring the stability of GPR143. Plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein PMEL, which is critical to the formation of stage II melanosomes.

Product Images For Melan-A Monoclonal Antibody (M2-7C10)

**Melan-A Antibody (MA5-15237) in IHC (P)**
Formalin-fixed, paraffin-embedded human melanoma stained with Mart-1 antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of tumor cells.

**Melan-A Antibody (MA5-15237) in WB**
Western blot of MART-1 using MART-1 Monoclonal Antibody (Product # MA5-15237) on CaC1 Cells.

**Melan-A Antibody (MA5-15237) in IP**
Immunoprecipitation of MART-1 using MART-1 Monoclonal Antibody (Product # MA5-15237) on denatured Human IMR-5 Cells.


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

thermofisher.com/contactus
14 Immunohistochemistry References

Species / Dilution | Summary
--- | ---
**Human / 1:100** | MA5-15237 was used in immunohistochemistry to report on two cases of glomus tumor and glomangioma of the nerve

- "Glomus tumor and glomangioma of the nerve. Report of two cases."
  - PubMed Article URL: http://dx.doi.org/10.3171/JNS/2008/108/2/0348

**Human / Not Cited** | MA5-15237 was used in immunohistochemistry to investigate specific CD8+ tissue-infiltrating T cells in a patient with melanoma

**Human / 1:200** | MA5-15237 was used in immunohistochemistry to study the molecular responses of the skin pigmentation system to repeated exposure to UVA and UVB

**Human / Not Cited** | The Journal of investigative dermatology (Jun 2010; 130: 1665)

- "Regulation of human skin pigmentation in situ by repetitive UV exposure: molecular characterization of responses to UVA and/or UVB."
  - PubMed Article URL: http://dx.doi.org/10.1038/jid.2010.5

**Mouse / Not Cited** | MA5-15237 was used in immunohistochemistry to develop a murine model to study the role of melanocytic expression of oncogenic NRAS in the development of childhood primary melanoma of the CNS

**Human / 1:200** | MA5-15237 was used in immunohistochemistry to report on a case of McCune-Albright syndrome with monolateral macrocrhooidism

**Human / Not Cited** | Cancer discovery (Apr 2013; 3: 458)

- "Primary melanoma of the CNS in children is driven by congenital expression of oncogenic NRAS in melanocytes."
  - PubMed Article URL: http://dx.doi.org/10.1158/2159-8290.CD-12-0464

**Human / 1:1000** | MA5-15237 was used in immunohistochemistry to examine the role of retinoblastoma pathway in cellular senescence

**Human / Not Cited** | Hormone research (Aug 2006; 65: 114)

- "McCune-Albright syndrome in a boy may present with a monolateral macrocrhooidism as an early and isolated clinical manifestation."
  - Author(s): Arrigo, T, Pirazzoli, P, De Sanctis, L, Leone, O, Wasniewska, M, Messina, MF, De Luca, F
  - PubMed Article URL: http://dx.doi.org/10.1159/000091279

**Human / 1:1000** | MA5-15237 was used in immunohistochemistry to investigate the aggregation of intraparenchymal nevus cells in lymph nodes

**Human / 1:1000** | The American journal of surgical pathology (May 2003; 27: 673)

- "Intraparenchymal nevus cell aggregates in lymph nodes: a possible diagnostic pitfall with malignant melanoma and carcinoma."
  - Author(s): Bandypadhyay, D, Curry, JL, Lin, Q, Richards, HW, Chen, D, Hornsby, PJ, Timchenko, NA, Medrano, EE
  - PubMed Article URL: http://dx.doi.org/10.1111/j.1474-9726.2007.00308.x

**Human / 1:100** | MA5-15237 was used in immunohistochemistry to report on a case of intraglomerular crescentic metastases of malignant melanoma

**Human / 1:100** | Human pathology (Dec 2011; 42: 2025)

- "Intraglomerular crescentic metastases of malignant melanoma."
  - Author(s): Ozluk, Y, Kilicaslan, I, Kazancioğlu, R, Demirkesen, C, Derin, D, Mandel, NM
  - PubMed Article URL: http://dx.doi.org/10.1016/j.humpath.2010.05.032


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MA5-15237 was used in immunohistochemistry to report on a case of cellular blue nevus of the uterus.

"Cellular blue nevus of the uterus: a case report and review of the literature."
Author(s): Eskue K,Prieto VG,Malpica A
PubMed Article URL:http://dx.doi.org/10.1097/PGP.0b013e3181e4b797

Human / 1:400

MA5-15237 was used in immunohistochemistry to investigate the effect of interleukin 12 administration on tumor-specific cytotoxic T lymphocytes and metastatic lesions

Cancer research (Jul 2000; 60: 3559)
"Peripheral burst of tumor-specific cytotoxic T lymphocytes and infiltration of metastatic lesions by memory CD8+ T cells in melanoma patients receiving interleukin 12."
Author(s): Mortarini R,Borri A,Tragni G,Bersani I,Veggetti C,Bajetta E,Pilotti S, Cerundolo V, Anichini A

Human / Not Cited

MA5-15237 was used in immunohistochemistry to study the role of CD8+ T-cell immunity in disease progression of advanced-stage melanoma

Clinical cancer research : an official journal of the American Association for Cancer Research (Jul 2004; 10: 4754)
"On the role of melanoma-specific CD8+ T-cell immunity in disease progression of advanced-stage melanoma patients."
PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-04-0260

Human / 1:250

MA5-15237 was used in immunohistochemistry to study the therapeutic potential of autologous tumor cells virally transduced with GM-CSF in metastatic melanoma patients

Journal of clinical oncology : official journal of the American Society of Clinical Oncology (Dec 2005; 23: 8978)
"Immunogenicity, including vitiligo, and feasibility of vaccination with autologous GM-CSF-transduced tumor cells in metastatic melanoma patients."
PubMed Article URL:http://dx.doi.org/10.1200/JCO.2005.01.6816

Human / Not Cited

MA5-15237 was used in immunohistochemistry to identify novel TSC2 mutations in one Chinese renal epithelioid AML patient: c.2652C>A; c.2688G>A based on sequencing result from biopsy tissue and report the outcomes of everolimus treatment.

MA5-15237 was used in Immunohistochemistry to identify novel TSC2 mutations in one Chinese renal epithelioid AML patient.

The Journal of investigative dermatology (Jun 2005; 124: 1326)
"Mechanisms of skin tanning in different racial/ethnic groups in response to ultraviolet radiation."
Author(s): Tadokoro T,Yamaguchi Y,Batzer J,Coelho SG,Zmudzka BZ, Miller SA,Wolber R,Beer JZ,Hearing VJ
PubMed Article URL:http://dx.doi.org/10.1080/15384047.2019.1665955

Human / 1:400

MA5-15237 was used in Immunohistochemistry to study the mechanisms by which UV radiation stimulates skin pigmentation in different ethnic groups

1 Flow Cytometry References

Species / Dilution
Summary

Human / Not Cited

MA5-15237 was used in flow cytometry to examine the allogenic glioma cells for the generation of therapeutic vaccines or cellular therapy

Clinical cancer 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

5 Western Blot References

Species / Dilution
Summary


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 accompanying package inserts (“Documentation”). All claims of suitability for use in applications regulated by FDA in research. The warranty provided herein is valid only when used properly. Unless otherwise stated in the Documentation, 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.

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### 1 Immunocytochemistry References

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<tr>
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<tbody>
<tr>
<td>Human / 1:100</td>
<td>MA5-15237 was used in immunocytochemistry to study the potential protective effects of facultative pigmentation following repeated exposure to UV irradiation</td>
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### 1 Immunoprecipitation References

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<tr>
<td>Human / Not Cited</td>
<td>MA5-15237 was used in immunoprecipitation to study the role of MART-1 on PMEL17/GP100 function and melanosome maturation</td>
</tr>
</tbody>
</table>

### Human / Not Cited

MA5-15237 was used in western blot to develop human artificial adjuvant vector cells for cancer immunotherapy.

Cancer research (Jan 2013; 73: 62)

"Vaccination with antigen-transfected, NK T cell ligand-loaded, human cells elicits robust in situ immune responses by dendritic cells."


PubMed Article URL: http://dx.doi.org/10.1158/0008-5472.CAN-12-0759

Non-human primate / Not Cited

MA5-15237 was used in western blot to study the therapeutic potential of a dendritic cell vaccine using mRNAs encoding tumor-associated antigens targeted to the proteasome.

Biochemical and biophysical research communications (Jun 2008; 371: 242)

"Dendritic cell vaccine with mRNA targeted to the proteasome by polyubiquitination."

Author(s): Hosoi A, Takeda Y, Sakuta K, Ueha S, Kurachi M, Kimura K, Maekawa R, Kakimi K

PubMed Article URL: http://dx.doi.org/10.1016/j.bbrc.2008.04.034

### Human / Not Cited

MA5-15237 was used in western blot to identify the B cell epitope of a monoclonal antibody against the melanoma-associated-antigen.

Peptides (Nov 2004; 25: 1865)

"Computational peptide dissection of Melan-a/MART-1 oncoprotein antigenicity."

Author(s): Tiwari R, Geliebter J, Lucchese A, Mittelman A, Kanduc D

PubMed Article URL: http://dx.doi.org/10.1016/j.peptides.2004.07.004

### Human / Not Cited

MA5-15237 was used in western blot to study the proteolytic release of glycoprotein nonmetastatic melanoma protein b from melanosomes.

FASEB journal : official publication of the Federation of American Societies for Experimental Biology (May 2010; 24: 1616)

"Glycoprotein nonmetastatic melanoma protein b, a melanocytic cell marker, is a melanosome-specific and proteolytically released protein."

Author(s): Hoashi T, Sato S, Yamaguchi Y, Passeron T, Tamaki K, Hearing VJ

PubMed Article URL: http://dx.doi.org/10.1096/fj.09-151019

### Human / 1:800

MA5-15237 was used in western blot to evaluate a strategy to identify the antigenic sequences in MHC molecules.

The Journal of investigative dermatology (Oct 2004; 123: 670)

"Identification of monoclonal anti-HMW-MAA antibody linear peptide epitope by proteomic database mining."

Author(s): Mittelman A, Tiwari R, Lucchese G, Willers J, Dummer R, Kanduc D

PubMed Article URL: http://dx.doi.org/10.1111/j.0022-202X.2004.23417.x

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<td>MA5-15237 was used in immunocytochemistry to evaluate the potential protective effects of facultative pigmentation following repeated exposure to UV irradiation</td>
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</tbody>
</table>

### Human / Not Cited

MA5-15237 was used in immunocytochemistry to study the potential protective effects of facultative pigmentation following repeated exposure to UV irradiation.

Experimental dermatology (Nov 2008; 17: 916)

"Cyclobutane pyrimidine dimer formation and p53 production in human skin after repeated UV irradiation."

Author(s): Yamaguchi Y, Coelho SG, Zmudzka BZ, Takahashi K, Beer JZ, Hearing VJ, Miller SA

PubMed Article URL: http://dx.doi.org/10.1111/j.1600-0625.2008.00722.x

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### Human / Not Cited

MA5-15237 was used in immunoprecipitation to study the role of MART-1 on PMEL17/GP100 function and melanosome maturation.

The Journal of biological chemistry (Apr 2005; 280: 14006)

"MART-1 is required for the function of the melanosomal matrix protein PMEL17/GP100 and the maturation of melanosomes."

Author(s): Hoashi T, Watabe H, Muller J, Yamaguchi Y, Vieira WD, Hearing VJ

PubMed Article URL: http://dx.doi.org/10.1074/jbc.M413692200