

Rabbit anti-Human, Mouse PMEL17/GP100 Polyclonal Antibody | anti-PMEL17/GP100 antibody

PMEL17/GP100 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323692	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

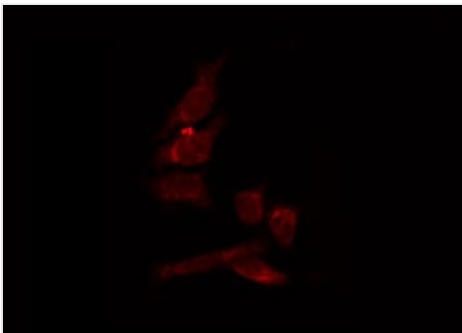
PRODUCT SYNONYMS

PMEL17/GP100; Polyclonal Antibody; PMEL17/GP100 Antibody; 95 kDa melanocyte specific secreted glycoprotein; 95 kDa melanocyte-specific secreted glycoprotein; D12S53E; gp100; M-beta; ME20; ME20 M/ME20 S; ME20-M; ME20-S; ME20M; ME20M/ME20S; ME20S; Melanocyte lineage specific antigen GP100; Melanocyte protein mel 17; Melanocyte protein Pmel 17; Melanocyte protein Pmel 17 precursor; Melanocytes lineage-specific antigen GP100; Melanoma associated ME20 antigen; Melanoma gp100; Melanoma-associated ME20 antigen; Melanosomal matrix protein 17; Melanosomal matrix protein17; P1; p100; p26; PMEL 17; PMEL; PMEL_HUMAN; PMEL17; Premelanosome protein; Secreted melanoma-associated ME20 antigen; SI; SIL; SILV; Silver (mouse homolog) like; Silver homolog; Silver locus protein homolog; Silver; mouse; homolog of; anti-PMEL17/GP100 antibody

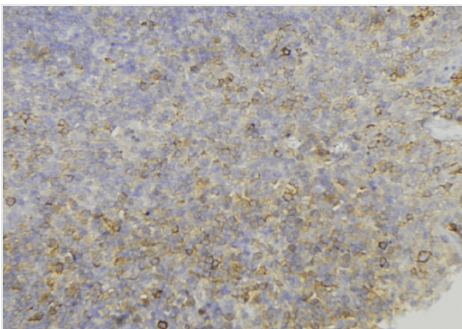
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	PMEL17/GP100 antibody detects endogenous levels of total PMEL17/GP100
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	575
Applicable Applications for anti-PMEL17/GP100 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PMEL17/GP100
Subcellular Location	Secreted and Endoplasmic Reticulum Membrane. Golgi Apparatus. Melanosome. Endosome > Multivesicular Body. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Localizes predominantly to intraluminal vesicles (ILVs) within multivesicular bodies. Associates with ILVs found within the lumen of premelanosomes and melanosomes and particularly in compartments that serve as precursors to the striated stage II premelanosomes.
Tissue Specificity	Preferentially expressed in melanomas. Some expression was found in dysplastic nevi. Not found in normal tissues nor in carcinomas. Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Dog, Chicken, Xenopus
Similarity	Pig (90%), Bovine (80%), Horse (89%), Sheep (80%), Dog (80%), Chicken (86%), Xenopus (89%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

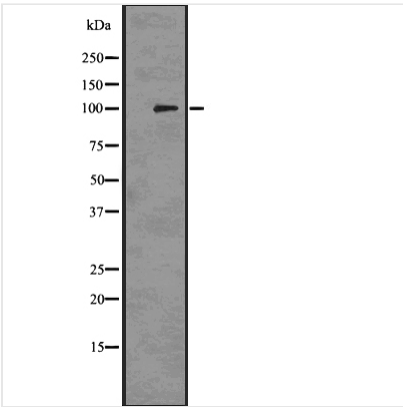
IMAGES



IF (Immunofluorescence)
AAA323692 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)
AAA323692 at 1/100 staining Human lymph node tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of PMEL17/GP100 using 293 whole cell lysates

ADDITIONAL INFORMATION

Related Product Information for anti-PMEL17/GP100 antibody	Function: Plays a central role in the biogenesis of melanosomes. Involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. Release of the soluble form, ME20-S, could protect tumor cells from antibody mediated immunity. Subunit Structure: Heterooligomer; disulfide-linked heterooligomers of M-alpha and M-beta. Interacts with MLANA. Interacts (via luminal domain) with CD63; this is important for normal sorting of the luminal domain after proteolytic processing. Post-translational Modifications: A small amount of P1/P100 (major form) undergoes glycosylation to yield P2/P120 (minor form). P2 is cleaved by a furin-like proprotein convertase (PC) in a pH-dependent manner in a post-Golgi, prelysosomal compartment into two disulfide-linked subunits: a large luminal subunit, M-alpha/ME20-S, and an integral membrane subunit, M-beta. Despite cleavage, only a small fraction of M-alpha is secreted, whereas most M-alpha and M-beta remain associated with each other intracellularly. M-alpha is further processed to M-alpha N and M-alpha C. M-alpha C further undergoes processing to yield M-alpha C1 and M-alpha C3 (M-alpha C2 in the case of PMEL17-is or PMEL17-ls). Formation of intraluminal fibrils in the melanosomes requires the formation of M-alpha that becomes incorporated into the fibrils. Stage II melanosomes harbor only Golgi-modified Pmel17 fragments that are derived from M-alpha and that bear sialylated O-linked oligosaccharides. N-glycosylated. O-glycosylated; contains sialic acid. Similarity: The RPT domain is essential for the generation of the fibrillar matrix of melanosomes. The luminal domain is necessary for correct processing and trafficking to melanosomes. Belongs to the PMEL/NMB family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	318037593
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NCBI GeneID	6490
NCBI Accession #	NP_001186982.1
NCBI GenBank Nucleotide #	NM_001200053.1
UniProt Accession #	P40967; Q12763; Q14448; Q14817; Q16565; B3KS57; B7Z6D7
Molecular Weight	Observed: 100 kDa Predicted: 71 kDa
NCBI Official Full Name	melanocyte protein PMEL isoform 2
NCBI Official Synonym Full Names	premelanosome protein
NCBI Official Symbol	PMEL
NCBI Official Synonym Symbols	P1; SI; SIL; ME20; P100; SILV; ME20M; gp100; ME20-M; PMEL17; D12S53E
NCBI Protein Information	melanocyte protein PMEL
UniProt Protein Name	Melanocyte protein PMEL
UniProt Gene Name	PMEL
UniProt Synonym Gene Names	D12S53E; PMEL17; SILV; ME20M; ME20-S; ME20S

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pmel17-gp100-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/323692>