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PMEL / SILV / gp100 Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS12375

Specification

PMEL / SILV / gp100 Antibody (C-Terminus) - Product Information

Application	**IHC-P**
Primary Accession	P40967
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**70kDa KDa**
Dilution	**IHC-P~~N/A**

PMEL / SILV / gp100 Antibody (C-Terminus) - Additional Information

Gene ID 6490

Other Names
Melanocyte protein PMEL, ME20-M, ME20M, Melanocyte protein Pmel 17, Melanocytes lineage-specific antigen GP100, Melanoma-associated ME20 antigen, P1, P100, Premelanosome protein, Silver locus protein homolog, M-alpha, 95 kDa melanocyte-specific secreted glycoprotein, P26, Secreted melanoma-associated ME20 antigen, ME20-S, ME20S, M-beta, PMEL, D12S53E, PMEL17, SILV

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
PMEL / SILV / gp100 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PMEL / SILV / gp100 Antibody (C-Terminus) - Protein Information

Name PMEL

Synonyms D12S53E, PMEL17, SILV

Function
Forms physiological amyloids that play a central role in melanosome morphogenesis and pigmentation. The maturation of unpigmented premelanosomes from stage I to II is marked by assembly of processed amyloidogenic fragments into parallel fibrillar sheets, which elongate the vesicle into a striated ellipsoidal shape. In pigmented stage III and IV melanosomes, the amyloid matrix serves as a platform where eumelanin precursors accumulate at high local concentrations for pigment formation. May prevent pigmentation-associated toxicity by sequestering toxic reaction intermediates of eumelanin biosynthesis pathway.

Cellular Location

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Golgi apparatus, cis-Golgi network membrane; Single-pass type I membrane protein. Endosome, multivesicular body. Melanosome Extracellular vesicle. Secreted. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Localizes predominantly to intralumenal 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 (PubMed:11694580, PubMed:12643545). Sorted to stage I melanosomes following its processing in the ER and cis-Golgi (PubMed:15096515) Transiently expressed at the cell surface before targeting to early melanosomes (PubMed:16760433, PubMed:30988362). Colocalizes with BACE2 in stage I and II melanosomes (PubMed:23754390). Colocalizes with CD63 and APOE at exosomes and in intraluminal vesicles within multivesicular endosomes (PubMed:21962903, PubMed:26387950)

Tissue Location
Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth. Overexpressed in melanomas. Some expression was found in dysplastic nevi.

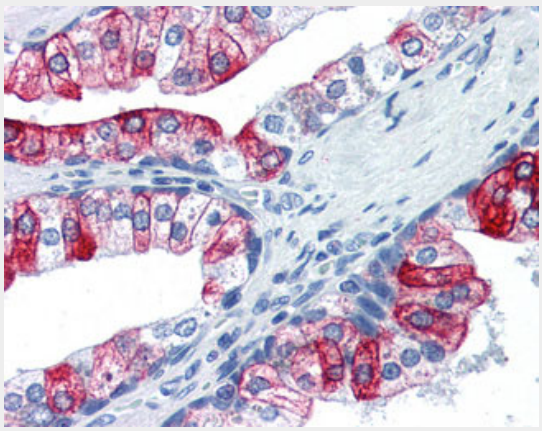
Volume
125 µl

PMEL / SILV / gp100 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PMEL / SILV / gp100 Antibody (C-Terminus) - Images



Anti-PMEL / SILV antibody IHC of human prostate.

PMEL / SILV / gp100 Antibody (C-Terminus) - Background

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.

PMEL / SILV / gp100 Antibody (C-Terminus) - References

Kwon B.S.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:9228-9232(1991).
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Adema G.J.,et al.J. Biol. Chem. 269:20126-20133(1994).
Kawakami Y.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:6458-6462(1994).
Bailin T.,et al.J. Invest. Dermatol. 106:24-27(1996).