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Anti-PMEL Reference Antibody (Novartis patent anti-PMEL17)

Recombinant Antibody Catalog # APR11015

Product Information

Application FC, Kinetics, Animal Model

Primary Accession P40967

Reactivity Human, Mouse, Rat

Clonality Monoclonal

Isotype IgG1 **Calculated MW** 70255

Additional Information

Target/Specificity PMEL

Endotoxin

Conjugation Unconjugated

Expression system CHO Cell

Format Purified monoclonal antibody supplied in PBS, pH6.0, without

preservative. This antibody is purified through a protein A column.

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.

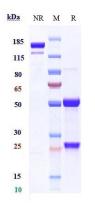
Golgi apparatus, cis-Golgi network membrane; Single-pass type I membrane protein. Endosome, multivesicular body. Melanosome Extracellular vesicle. Secreted. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Localizes predominantly to

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)

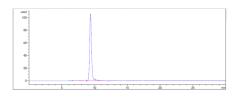
Tissue Location

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.

Images



Anti-PMEL Reference Antibody (Novartis patent anti-PMEL17) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-PMEL Reference Antibody (Novartis patent anti-PMEL17)is more than 96.2%, determined by SEC-HPLC.

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