

Anti-HMB45 Antibody

Rabbit polyclonal antibody to HMB45 Catalog # AP61056

Specification

Anti-HMB45 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>P40967</u> <u>O60696</u> Human, Mouse, Rat Rabbit Polyclonal 70255

Anti-HMB45 Antibody - Additional Information

Gene ID 6490

Other Names

D12S53E; PMEL17; SILV; 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

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human HMB45. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-HMB45 Antibody - 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:26387950)

Tissue Location

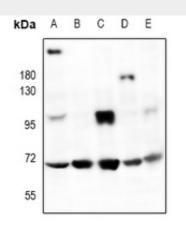
Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth. Overexpressed in melanomas. Some expression was found in dysplastic nevi.

Anti-HMB45 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-HMB45 Antibody - Images



Western blot analysis of HMB45 expression in A375 (A), PC12 (B), AML12 (C), mouse kidney (D), rat ovary (E) whole cell lysates.



Anti-HMB45 Antibody - Background

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