

Anti-HMB45 Antibody
Rabbit polyclonal antibody to HMB45
Catalog # AP61056

Specification

Anti-HMB45 Antibody - Product Information

Application	WB
Primary Accession	P40967
Other Accession	Q60696
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	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

Recognizes endogenous levels of HMB45 protein.

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 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 (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

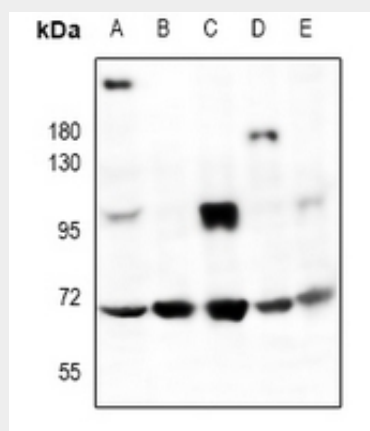
Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth. Overexpressed in melanomas. Some expression was found in dysplastic nevi.

Anti-HMB45 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

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