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HMB-45

Mouse Monoclonal antibody(Mab)
Catalog # AD80079

Product Information

Application	IHC-P
Primary Accession	P40967
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	HMB-45
Calculated MW	70255

Additional Information

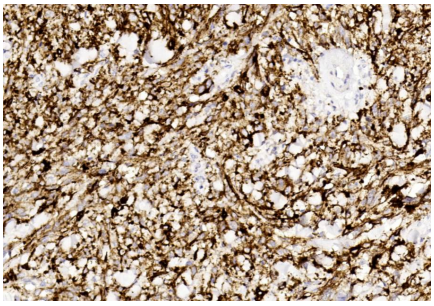
Gene ID	6490
Gene Name	PMEL
Other Names	Melanocyte protein PMEL, ME20-M, ME20M, Melanocyte protein Pmel 17, Melanocytes lineage-specific antigen GP100, Melanoma-associated ME20 antigen, P1, P100, Premelanosome protein, Silver locus protein homolog, M-alpha, 95 kDa melanocyte-specific secreted glycoprotein, P26, Secreted melanoma-associated ME20 antigen, ME20-S, ME20S, M-beta, PMEL, D12S53E, PMEL17, SILV
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	HMB-45 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

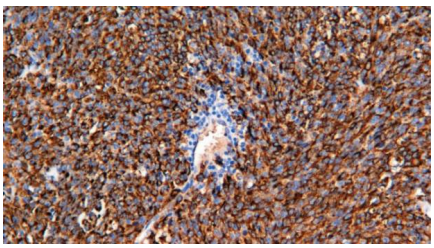
Name	PMEL
Synonyms	D12S53E, PMEL17, SILV
Function	Forms physiological amyloids that play a central role in melanosome morphogenesis and pigmentation. The maturation of unpigmented premelanosomes from stage I to II is marked by assembly of processed amyloidogenic fragments into parallel fibrillar sheets, 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



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human melanoma tissue was performed with HMB-45 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human melanoma tissue was performed with HMB-45 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.