

Anti-PMEL17 / GP100 Rabbit Monoclonal Antibody

Catalog # ABO14177

Product Information

Application	WB, IHC
Primary Accession	P40967
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-PMEL17 / GP100 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

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
Calculated MW	70255
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Subcellular Localization	Endoplasmic reticulum membrane; Single-pass type I membrane protein. Golgi apparatus. Melanosome. Endosome, multivesicular body. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. 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.
Tissue Specificity	Preferentially expressed in melanomas. Some expression was found in dysplastic nevi. Not found in normal tissues nor in carcinomas. Normally expressed at low levels in quiescent adult melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

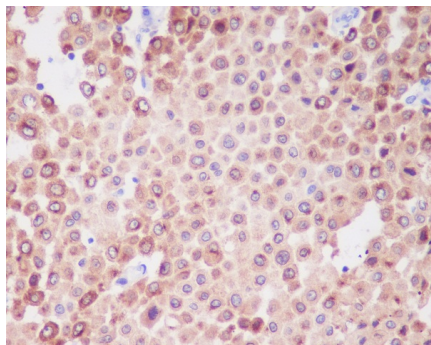
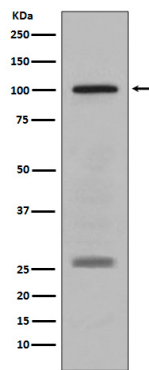
Clone Names Immunogen	Clone: AHH-16 A synthesized peptide derived from human PMEL17 / GP100
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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.

Images

Western blot analysis of PMEL17 / GP100 expression in human melanoma lysate.



Immunohistochemical analysis of paraffin-embedded human melanoma, using PMEL17 / GP100 Antibody.

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