

# Anti-PMEL Reference Antibody (Genentech anti-PMEL17)

Recombinant Antibody Catalog # APR11014

## **Product Information**

| Application       | FC, Kinetics, Animal Model |
|-------------------|----------------------------|
| Primary Accession | <u>P40967</u>              |
| Reactivity        | Human, Mouse, Rat          |
| Clonality         | Monoclonal                 |
| Isotype           | IgG1                       |
| Calculated MW     | 70255                      |

### **Additional Information**

| Target/Specificity       | PMEL  |
|--------------------------|---|
| Endotoxin<br>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<br>morphogenesis and pigmentation. The maturation of unpigmented<br>premelanosomes from stage I to II is marked by assembly of processed<br>amyloidogenic fragments into parallel fibrillar sheets, which elongate the<br>vesicle into a striated ellipsoidal shape. In pigmented stage III and IV<br>melanosomes, the amyloid matrix serves as a platform where eumelanin<br>precursors accumulate at high local concentrations for pigment formation.<br>May prevent pigmentation-associated toxicity by sequestering toxic reaction<br>intermediates of eumelanin biosynthesis pathway. |
| Cellular Location | Endoplasmic reticulum membrane; Single-pass type I membrane protein.<br>Golgi apparatus, cis-Golgi network membrane; Single-pass type I membrane<br>protein. Endosome, multivesicular body. Melanosome Extracellular vesicle.<br>Secreted. Note=Identified by mass spectrometry in melanosome fractions<br>from stage I to stage IV (PubMed:17081065) Localizes predominantly to<br>intralumenal vesicles (ILVs) within multivesicular bodies. Associates with ILVs<br>found within the lumen of premelanosomes and melanosomes and  |

|                 | particularly in compartments that serve as precursors to the striated stage II<br>premelanosomes (PubMed:11694580, PubMed:12643545). Sorted to stage I<br>melanosomes following its processing in the ER and cis-Golgi<br>(PubMed:15096515) Transiently expressed at the cell surface before targeting<br>to early melanosomes (PubMed:16760433, PubMed:30988362). Colocalizes<br>with BACE2 in stage I and II melanosomes (PubMed:23754390). Colocalizes<br>with CD63 and APOE at exosomes and in intraluminal vesicles within<br>multivesicular endosomes (PubMed:21962903, PubMed:26387950) |
|-----------------|--|
| Tissue Location | Normally expressed at low levels in quiescent adult melanocytes but<br>overexpressed by proliferating neonatal melanocytes and during tumor<br>growth. Overexpressed in melanomas. Some expression was found in<br>dysplastic nevi.  |

#### Images



Anti-PMEL Reference Antibody (Genentech 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 (Genentech anti-PMEL17) is more than 99.73% ,determined by SEC-HPLC.

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