

SILV Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13753c**Specification**

SILV Antibody (Center) Blocking peptide - Product InformationPrimary Accession [P40967](#)**SILV Antibody (Center) Blocking peptide - 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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13753c was selected from the Center region of SILV. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SILV Antibody (Center) Blocking peptide - 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:12643545, PubMed:11694580). 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:30988362, PubMed:16760433). 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, PubMed:21962903)

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.

SILV Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SILV Antibody (Center) Blocking peptide - Images**SILV Antibody (Center) Blocking peptide - Background**

SILV plays a central role in the biogenesis of melanosomes. Involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. Release of the soluble form, ME20-S, could protect tumor cells from antibody mediated immunity.

SILV Antibody (Center) Blocking peptide - References

Leonhardt, R.M., et al. J. Biol. Chem. 285(21):16166-16183(2010)Hoashi, T., et al. FASEB J. 24(3):916-930(2010)Watt, B., et al. J. Biol. Chem. 284(51):35543-35555(2009)McGlinchey, R.P., et al. Proc. Natl. Acad. Sci. U.S.A. 106(33):13731-13736(2009)Kummer, M.P., et al. J. Biol. Chem. 284(4):2296-2306(2009)