Product Information

Anti-PMEL antibody produced in rabbit

Affinity isolated antibody

SAB4200867

Product Description

Anti-PMEL antibody is developed in rabbit using synthetic peptide corresponding to the N-terminal region of human PMEL protein (GeneID: 6490), conjugated to KLH as immunogen. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-PMEL antibody specifically recognizes human PMEL protein. The antibody may be used in various immunochemical techniques including Immunoblotting (~100 kDa), Immunohistochemistry and Immunofluorescence.

Detection of the PMEL band by Immunoblotting is specifically inhibited by the immunogen.

The melanocyte-specific protein PMEL (also known as Pmel17, gp100, melanocyte protein, premelanosome protein or silver locus protein homolog (SILV)) is a type I transmembrane glycoprotein that is expressed primarily in pigment cells of the skin and eye. In melanosomes, the protein forms a fibrillar matrix on which the UV-shielding pigment melanin is deposited.[1-2] PMEL fibrils are a major functional component of the melanosomal compartment as they optimize melanin polymerization, condensation and storage.[1,3] PMEL fibrils have an amyloidogenic nature and share features with pathological amyloids.[4] Mutations in PMEL are associated with pigmentation disorders and/or impairments in eye development in various species.[1,5,6]

PMEL is suggested an excellent model system to study mechanisms of intracellular amyloid formation.[1]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for research use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working dilution of 1:1,000-1:2,000 is recommended using human melanoma SK-MEL-28 cell lysate.

Immunofluorescence: a working dilution of 1:2,000-1:4,000 is recommended using human melanoma SK-MEL-28 cells.

Note: In order to obtain best results in different techniques and preparations it is recommended to determine optimal working concentration by titration test.

References

1. Watt B., et al., *Pigment cell & melanoma res.*, **26**, 300-15 (2013).
2. Hee JS., et al., *Sci Rep.*, **7**, 44064 (2017).
3. Bissig C., et al., *Int J Mol Sci.*, **17**, E1438 (2016).
4. Fowler DM., et al., *PLoS Biol.*, **4**, e6 (2006).
5. Schonthaler HB., et al., *Dev Biol.*, **284**, 421-36 (2005).
6. Burgoyne T., et al., *J Cell Sci.*, **128**, 1400-7 (2015).

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