3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-PMEL antibody, Mouse monoclonal
Clone PL-19, purified from hybridoma cell culture

Product Number **SAB4200842**

Product Description

Monoclonal Anti-PMEL antibody (mouse IgG1 isotype) is derived from the PL-19 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from a mouse immunized with a synthetic peptide corresponding to a N-terminal region of human PMEL protein (GeneID: 6490), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Sigma ISO-2). The antibody is purified from culture supernatant of hybridoma cells.

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

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 eye and skin. In melanosomes, PMEL 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 the melanin polymerization, condensation and storage.[1,3]
In addition, PMEL fibrils have an amyloidogenic nature sharing features with pathological amyloids.[4] Thus, PMEL is suggested as an excellent model system to study mechanisms of intracellular amyloid formation.[1]
Mutations in PMEL are associated with pigmentation disorders and/or impairments in eye development in various species.[1,5,6]

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

For R&D 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 concentration of 1-2 µg/mL is recommended using human melanoma SK-MEL-28 cell lysate.

Immunofluorescence: a working concentration of 1-2 µg/mL 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).
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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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