

Anti-RAP tag [PMab-2] Standard Size Ab00885-1.1

Isotype and Format: Mouse IgG1, Kappa

Clone Number: PMab-2

Alternative Name(s) of Target: Podoplanin; E11 antigen epitope; Glycoprotein 38; Gp38; OTS-8; Ots8; RTI140; T1-alpha; T1A; Type I cell 40 kDa protein

UniProt Accession Number of Target Protein: Q64294

Published Application(s): epitope tag, WB, ELISA, FC, IHC

Published Species Reactivity: Rat

Immunogen: This antibody was raised by immunising mice with 14-residue synthetic peptide rpp3851, which corresponds to amino acids 38-51 (GDDMVNPGLEDRIEC) of the platelet-aggregation-stimulating (PLAG) domain of rat podoplanin (PDPN). Spleen cells were then harvested, and fused to P3U1 cells to generate stable hybridomas.

Specificity: This antibody is specific for amino acids 38-51 (GDDMVNPGLEDRIEC) of the platelet-aggregation-stimulating (PLAG) domain of rat podoplanin (PDPN). PDPN is a type I transmembrane protein that interacts with the platelet receptor C-type lectin-like receptor-2 (CLEC-2). PDPN is expressed by a wide variety of cells, including podocytes, lymphatic endothelial cells and type I alveolar cells. PDPN is also upregulated on certain cancer cells, where it mediates tumour-induced platelet aggregation by binding to CLEC-2 on platelets

Application Notes: The specificity of this antibody for endogenous rat podoplanin (PDPN) has been confirmed in ELISA, Western blot and flow cytometry analysis (Oki et al, 2015), where PMab-2 was shown not to react with human and mouse podoplanin. Flow cytometry has also been used to demonstrate the high binding affinity of this antibody (KD of PMab-2 = 5.9×10^{-10} M) (Oki et al, 2015). In immunohistochemical analysis, this antibody is highly sensitive to rat PDPN, detecting type I lung alveolar cells, colon lymphatic endothelial cells, podocytes and Bowman's capsule epithelial cells at low concentration (Oki et al, 2015). This antibody possess high affinity and specificity for the RAP epitope tag (DMVNPGLEDRIE), and can, therefore, be used to detect proteins in Western blots, flow cytometry and sandwich enzyme-linked immunosorbent assays (ELISA), as well as for protein purification. (Fujii et al, 2017).

Antibody First Published in: Oki et al Development of Sensitive Monoclonal Antibody PMab-2 Against Rat Podoplanin Monoclonal Antibodies in Immunodiagnosis and Immunotherapy. December 2015, 34(6): 396-403. [PMID:26683179](#)

Note on publication: Describes the original generation and characterisation of this antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.