

CD81 (D5O2Q) Rabbit mAb

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Applications: W, IP, IHC-P, IF-IC, FC-L	Reactivity: M	Sensitivity: Endogenous	MW (kDa): 22	Source/Isotype: Rabbit IgG	UniProt ID: #P35762	Entrez-Gene Id: 12520
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Live)

Dilution

1:1000
1:50
1:50 - 1:200
1:200 - 1:400
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #79273.

Specificity/Sensitivity

CD81 (D5O2Q) Rabbit mAb recognizes endogenous levels of total CD81 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro184 of mouse CD81 protein.

Background

CD81 belongs to the tetraspanin family, which is characterized by four transmembrane domains, one short extracellular domain (ECL1), and one long extracellular domain (ECL2) (1-3). Tetraspanins interact with a variety of cell surface proteins and intracellular signaling molecules in specialized tetraspanin enriched microdomains (TEMs) where they mediate a range of processes including adhesion, motility, membrane organization, and signal transduction (3). CD81, like other tetraspanins, is enriched in exosomes (4). Many research studies demonstrate a role for CD81 in lymphocyte signaling (5-7). CD81 is also a well-characterized receptor for Hepatitis C Virus and facilitates the entry of the virus into target cells (8,9).

Background References

- Oren, R. et al. (1990) *Mol Cell Biol* 10, 4007-15.
- Levy, S. et al. (1991) *J Biol Chem* 266, 14597-602.
- Hemler, M.E. (2005) *Nat Rev Mol Cell Biol* 6, 801-11.
- Escola, J.M. et al. (1998) *J Biol Chem* 273, 20121-7.
- Levy, S. et al. (1998) *Annu Rev Immunol* 16, 89-109.
- Levy, S. and Shoham, T. (2005) *Nat Rev Immunol* 5, 136-48.
- Jones, E.L. et al. (2011) *Biochem Soc Trans* 39, 506-11.
- Pileri, P. et al. (1998) *Science* 282, 938-41.
- Bartosch, B. et al. (2003) *J Biol Chem* 278, 41624-30.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-L:** Flow Cytometry (Live)

Cross-Reactivity Key

M: Mouse

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