

#10037 Store at -20°C

## CD81 (D5O2Q) Rabbit mAb



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> WB, IP, IHC-P, IF-IC, FC-L	<b>Reactivity:</b> M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 22	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P35762	<b>Entrez-Gene Id:</b> 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.
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- 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

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

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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