Revision 1

#13355 Store at -20C

CD102/ICAM-2 (D7P2Q) Rabbit mAb

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P, IF-IC, FC-FP	H	Endogenous	45, 55	Rabbit IgG	#P13598	3384

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:100
Immunofluorescence (Immunocytochemistry)	1:100
Flow Cytometry (Fixed/Permeabilized)	1:100

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.

Specificity / Sensitivity

CD102/ICAM-2 (D7P2Q) Rabbit mAb recognizes endogenous levels of total CD102 (ICAM-2) protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human CD102 (ICAM-2) protein.

Background

Intercellular cell adhesion molecule-2 (CD102/ICAM-2) is a cell surface glycoprotein that belongs to the immunoglobulin superfamily (IgSF) of adhesion molecules. Like CD54/ICAM-1, CD102/ICAM-2 is a ligand that binds the leukocyte adhesion molecule LFA-1 (leukocyte function-associated antigen-1), which mediates intercellular interactions between immune cells and other cell types (1).
Expression of CD102/ICAM-2 has been shown to affect angiogenesis (2), cellular radioresistance (3) and anti-tumor immune response (4). Along with CD54/ICAM-1, CD102/ICAM-2 mediates T cell crawling and diapedesis across the blood-brain barrier (5), as well as T cell migration across the bronchial epithelium (6). CD102/ICAM-2 interaction with the actin cytoskeleton through α-actinin has been shown to limit the mobility on neuroblastoma cells (7), and this effect is dependent on glycosylation of CD102/ICAM-2 (8).

Background References

1. Staunton, D.E. et al. (1989) *Nature* 339, 61-4.
2. Huang, M.T. et al. (2005) *Blood* 106, 1636-43.
3. Ishigami, T. et al. (2008) *Br J Cancer* 98, 1357-65.
4. Hiraoka, N. et al. (2011) *Gastroenterology* 140, 310-21.
5. Steiner, O. et al. (2010) *J Immunol* 185, 4846-55.
6. Porter, J.C. and Hall, A. (2009) *FASEB J* 23, 492-502.
7. Yoon, K.J. et al. (2008) *PLoS One* 3, e3629.
8. Feduska, J.M. et al. (2013) *BMC Cancer* 13, 261.

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 BSA, 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-FP:** Flow Cytometry (Fixed/Permeabilized)

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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