

**CD151 (E4I9J) XP® Rabbit mAb**

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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:
W, IHC-P	H	Endogenous	28	Rabbit IgG	#P48509	977

**Product Usage Information****Application**

Western Blotting  
Immunohistochemistry (Paraffin)

**Dilution**

1:1000  
1:400

**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**

CD151 (E4I9J) XP® Rabbit mAb recognizes endogenous levels of total CD151 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly138 of human CD151 protein.

**Background**

CD151 (PETA-3, SFA-1) is a member of the evolutionarily conserved tetraspanin family of multipass glycoproteins (TM4SF), highlighted by four transmembrane domains, two extracellular loops, and N/C-termini that reside within the cytoplasm. Identified as the first member of the tetraspanin family to be implicated in tumorigenesis, research studies have demonstrated that CD151 participates in tumor neovascularization (1), tumor cell cell invasion (2), and cell adhesion (3). Furthermore, a positive correlation exists between CD151 expression levels and poor prognosis for tumors of the lung (4), kidney (5), and prostate (6). CD151 is localized predominantly to the plasma membrane and research studies have demonstrated that CD151 exerts its pro-tumorigenic effects, in part, through the modulation of laminin-binding integrins (7-9) and oncogenic receptor tyrosine kinases, such as c-Met (10,11) and EGFR (12).

**Background References**

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3. Zhang, F. et al. (2011) *Blood* 118, 4274-84.
4. Tokuhara, T. et al. (2001) *Clin Cancer Res* 7, 4109-14.
5. Yoo, S.H. et al. (2011) *Histopathology* 58, 191-7.
6. Ang, J. et al. (2004) *Cancer Epidemiol Biomarkers Prev* 13, 1717-21.
7. Sincock, P.M. et al. (1999) *J Cell Sci* 112 ( Pt 6), 833-44.
8. Winterwood, N.E. et al. (2006) *Mol Biol Cell* 17, 2707-21.
9. Liu, L. et al. (2007) *J Biol Chem* 282, 31631-42.
10. Klosek, S.K. et al. (2009) *Biochem Biophys Res Commun* 379, 1097-100.
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12. Yang, X.H. et al. (2008) *Cancer Res* 68, 3204-13.

**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 **IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human

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