

CMTM4 Antibody

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M	Endogenous	22	Rabbit	#Q8IZR5	146223

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:200

Storage

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

Specificity/Sensitivity

CMTM4 Antibody recognizes endogenous levels of total CMTM4 protein. This antibody does not cross-react with CMTM6 protein.

Species predicted to react based on 100% sequence homology

Hamster, Bovine

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu202 of human CMTM4 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

CKLF-like MARVEL transmembrane domain-containing protein 4 (CMTM4) is a member of the chemokine-like factor (CKLF)-like MARVEL transmembrane domain-containing family (1). CMTM4 acts as a tumor suppressor in various malignancies, and regulates cell growth and transition through the cell cycle in HeLa cells (1-4). CMTM4 plays an important role in angiogenesis, enabling internalization of membrane-bound vascular endothelial cadherin at adherens junctions, mediating endothelial barrier function, and controlling vascular sprouting (5). In the immune system, CMTM4 acts as a backup for CMTM6 to regulate plasma membrane expression of PD-L1, an immune inhibitory ligand critical for immune tolerance to self and anti-tumor immunity (6-8). CMTM4 may also protect PD-L1 from being polyubiquitinated and targeted for degradation (8). Due to the roles of CMTM4 in the immune system and as a tumor suppressor, it is being investigated as a therapeutic target for the treatment of cancer.

Background References

1. Plate, M. et al. (2010) *Mol Cells* 29, 355-61.
2. Li, T. et al. (2015) *J Exp Clin Cancer Res* 34, 122.
3. Zhang, H. et al. (2015) *Iran J Basic Med Sci* 18, 1020-6.
4. Bei, C. et al. (2017) *Onco Targets Ther* 10, 5439-43.
5. Chrifi, I. et al. (2018) *Angiogenesis* , .
6. Mezzadra, R. et al. (2017) *Nature* 549, 106-10.
7. Imamovic, D. and Vranic, S. (2017) *Ann Transl Med* 5, 467.
8. Burr, M.L. et al. (2017) *Nature* 549, 101-5.

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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse

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