Revision 1

Store at -20C

#18527

TRAF4 (D1N3A) 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:
W	H M	Endogenous	50	Rabbit IgG	#Q9BUZ4	9618

Product Usage Information

Application	Dilution
Western Blotting	1:1000

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

TRAF4 (D1N3A) Rabbit mAb recognizes endogenous levels of total TRAF4 protein. An unknown background band is detected in some cell lines at 80kDa.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg124 of human TRAF4 protein.

Background

TRAFs (TNF receptor-associated factors) are a family of multifunctional adaptor proteins that bind to surface receptors and recruit additional proteins to form multiprotein signaling complexes capable of promoting cellular responses (1-3). Members of the TRAF family share a common carboxy-terminal "TRAF domain", which mediates interactions with associated proteins; many also contain amino-terminal Zinc/RING finger motifs. The first TRAFs identified, TRAF1 and TRAF2, were found by virtue of their interactions with the cytoplasmic domain of TNF-receptor 2 (TNFRII) (4). The six known TRAFs (TRAF1-6) act as adaptor proteins for a wide range of cell surface receptors and participate in the regulation of cell survival, proliferation, differentiation, and stress responses.
TRAF4, also referred to as CART1 and MLN62, is a divergent member of the TRAF family with relatively weak binding to TNFR family members (5-7). Interactions have been observed between TRAF4 and the neurotrophin receptor p75-NGFR, lymphotoxin-β receptor, and GITR (8-10). While originally identified in metastatic breast carcinoma, TRAF4 has been shown to contribute to tumor growth and invasion in various cancers including breast, lung and colon (11-13). Expression of Traf4 is induced by the tumor suppressor p53 in response to DNA damage, and can promote apoptosis (14).TRAF4 has also been shown to play a critical role in TGF-β signaling, where it has been found to antagonize the E3 ligase Smurf, resulting in enhanced receptor stabilization driving breast cancer metastasis (15).

Background References

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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

Cross-Reactivity Key

H: Human **M:** Mouse

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