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**TRAF4 (D1N3A) Rabbit mAb****Cell Signaling**  
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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	H M	Endogenous	50	Rabbit IgG	#Q9BUZ4	9618

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	TRAF4 (D1N3A) Rabbit mAb recognizes endogenous levels of total TRAF4 protein. An unknown background band is detected in some cell lines at 80kDa.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg124 of human TRAF4 protein.	
<b>Background</b>	<p>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.</p> <p>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).</p>	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Arch, R.H. et al. (1998) <i>Genes Dev</i> 12, 2821-30.</li> <li>2. Chung, J.Y. et al. (2002) <i>J Cell Sci</i> 115, 679-88.</li> <li>3. Bradley, J.R. and Pober, J.S. (2001) <i>Oncogene</i> 20, 6482-91.</li> <li>4. Rothe, M. et al. (1994) <i>Cell</i> 78, 681-92.</li> <li>5. Kawamata, S. et al. (1998) <i>J Biol Chem</i> 273, 5808-14.</li> <li>6. Régnier, C.H. et al. (1995) <i>J Biol Chem</i> 270, 25715-21.</li> <li>7. Bièche, I. et al. (1996) <i>Cancer Res</i> 56, 3886-90.</li> <li>8. Yang, K. et al. (2015) <i>Int J Clin Exp Pathol</i> 8, 1419-26.</li> <li>9. Camilleri-Broët, S. et al. (2007) <i>Oncogene</i> 26, 142-7.</li> <li>10. Li, W. et al. (2013) <i>Cancer Res</i> 73, 6938-50.</li> <li>11. Ye, X. et al. (1999) <i>J Biol Chem</i> 274, 30202-8.</li> <li>12. Esparza, E.M. and Arch, R.H. (2004) <i>Cell Mol Life Sci</i> 61, 3087-92.</li> <li>13. Krajewska, M. et al. (1998) <i>Am J Pathol</i> 152, 1549-61.</li> <li>14. Sax, J.K. and El-Deiry, W.S. (2003) <i>J Biol Chem</i> 278, 36435-44.</li> <li>15. Zhang, L. et al. (2013) <i>Mol Cell</i> 51, 559-72.</li> </ol>	

**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**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**Trademarks and Patents**

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