

#8028 Store at -20C

## TRAF6 (D21G3) Rabbit mAb



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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:
WB, IP	H Mk	Endogenous	60	Rabbit IgG	#Q9Y4K3	7189

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
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

TRAF6 (D21G3) Rabbit mAb recognizes endogenous levels of total TRAF6 protein. This antibody is not predicted to cross-react with other TRAF family members.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human TRAF6 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 (TNFR2) (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. TRAF6 plays a critical role in innate and adaptive immunity, bone metabolism, and development of certain tissues including the nervous system (5). TRAF6 deficiency results in osteopetrosis and defective IL-1, CD40, and LPS signaling (6) as well as defects in neuronal development (7). Unlike other TRAF family members that mediate signaling through TNF, TRAF6 has unique binding activities (8) that result in signaling responses from the interleukin-1 receptor (IL-1R) (9), toll-like receptor (10,11), CD40 (12), RANK (13,14), and p75 neurotrophin receptor (15). TRAF6 associates directly with CD40 and RANK, and indirectly with IL-1R/TLR through IRAK (10). This leads to activation of NF-κB and MAP kinase signaling pathways through downstream association with the TAB/TAK-1 complex (16). TRAF6 also activates Src family nonreceptor tyrosine kinases leading to Akt activation (17).

### 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**

**WB:** Western Blotting **IP:** Immunoprecipitation

**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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