

Purified anti-TRAF6 Antibody

Catalog# / Size	654501 / 25 µg 654502 / 100 µg
Clone	T2-1SC
Regulatory Status	RUO
Other Names	TNF receptor-associated factor 6 (TRAF6), E3 ubiquitin protein ligase, Interleukin-1 signal transducer
Isotype	Mouse IgG1, κ
Description	<p>The protein encoded by this gene is a member of the TNF receptor-associated factor (TRAF) protein family. 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. 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 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>TRAF6 plays a critical role in innate and adaptive immunity, bone metabolism, and development of certain tissues including the nervous system. This protein has an amino terminal RING domain which is followed by four zinc-finger motifs, a central coiled-coil region and a highly conserved carboxyl terminal domain, known as the TRAF-C domain. TRAF6 deficiency results in osteopetrosis and defective IL-1, CD40, and LPS signaling as well as defects in neuronal development. Unlike other TRAF family members that mediate signaling through TNF, TRAF6 has unique binding activities that result in signaling responses from the interleukin-1 receptor (IL-1R), toll-like receptor, CD40, RANK, and p75 neurotrophin receptor. TRAF6 associates directly with CD40 and RANK, and indirectly with IL-1R/TLR through IRAK. This leads to activation of NF-κB and MAP kinase signaling pathways through downstream association with the TAB/TAK-1 complex. TRAF6 also activates Src family nonreceptor tyrosine kinases leading to Akt activation.</p>

Product Details

Verified Reactivity	Human, Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Partial recombinant human TRAF6 protein (352-522 aa) expressed from <i>E. coli</i> .
Formulation	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.05% sodium azide.
Preparation	Affinity purified
Concentration	0.5 mg/ml
Storage & Handling	Upon receipt, store undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.5 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Product Citations	<ol style="list-style-type: none">1. Tan Y, <i>et al.</i> 2019. Cell. 177:384. PubMed2. Ben J, <i>et al.</i> 2019. Nat Commun. 10:1801. PubMed3. Mitsumura T, <i>et al.</i> 2018. Blood Adv. 2.502083333. PubMed
RRID	AB_2561867 (BioLegend Cat. No. 654501) AB_2561868 (BioLegend Cat. No. 654502)

Antigen Details

Structure	522 amino acids, predicted MW of 60 kD
Distribution	Cytoplasm, Nucleus
Function	A unique member of the TRAF family of adaptor proteins involved in both the TNF receptor superfamily and the interleukin-1 receptor (IL-1R)/Toll-like receptor (TLR) superfamily signal transduction pathways
Interaction	Homotrimer, homooligomer; Binds to TNFRSF5/CD40 and TNFRSF11A/RANK; Interacts with RBCK1 and TRAF3IP2
Biology Area	Cell Biology, Neuroinflammation, Neuroscience, Signal Transduction, Ubiquitin/Protein Degradation
Antigen References	<ol style="list-style-type: none">1. Rothe M, <i>et al.</i> 1994. <i>Cell</i> 78:681.2. Arch RH, <i>et al.</i> 1998. <i>Genes Dev.</i> 12:2821.3. Ye H, <i>et al.</i> 2002. <i>Nature</i> 418:443.4. Yang WL, <i>et al.</i> 2009. <i>Science</i> 325:1134.5. Qu F, <i>et al.</i> 2012. <i>Mol. Cell. Biol.</i> 32:3925.6. Akiyama T, <i>et al.</i> 2012. <i>Front Immunol.</i> 3:278.7. Wei J, <i>et al.</i> 2012. <i>PLoS One</i> 1:e49567.
Gene ID	7189 22034

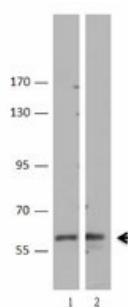
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-TRAF6

Product Data



Hela (Lane 1) and 3T3 (Lane 2) cell lysates were resolved by electrophoresis, transferred to nitrocellulose and probed with a monoclonal anti-TRAF6 antibody. Proteins were visualized using a goat anti-mouse-IgG secondary conjugated to HRP and chemiluminescence detection.

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