

TRAF6 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

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 60	Source/Isotype: Rabbit	UniProt ID: #Q9Y4K3	Entrez-Gene Id: 7189
-------------------------------	-------------------------	-----------------------------------	------------------------	----------------------------------	-------------------------------	--------------------------------

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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

TRAF6 Antibody detects endogenous levels of total TRAF6 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a sythetic peptide corresponding to resides near the amino terminus of human TRAF6. Antibodies were purified by protein A and peptide affinity chromatography.

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 results 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). It 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

1. Arch, R.H. et al. (1998) *Genes Dev* 12, 2821-30.
2. Chung, J.Y. et al. (2002) *J Cell Sci* 115, 679-88.
3. Bradley, J.R. and Pober, J.S. (2001) *Oncogene* 20, 6482-91.
4. Rothe, M. et al. (1994) *Cell* 78, 681-92.
5. Wu, H. and Arron, J.R. (2003) *Bioessays* 25, 1096-1105.
6. Lomaga, M.A. et al. (1999) *Genes Dev.* 13, 1015-1024.
7. Lomaga, M.A. et al. (2000) *J. Neurosci.* 20, 7384-7393.
8. Ye, H. et al. (2002) *Nature* 418, 443-447.
9. Cao, Z. et al. (1996) *Nature* 383, 443-446.
10. Muzio, M. et al. (1997) *Science* 278, 1612-1615.
11. Medzhitov, R. et al. (1998) *Mol. Cell* 2, 253-258.
12. Ishida, T. et al. (1996) *J. Biol. Chem.* 271, 28745-28748.
13. Darnay, B.G. et al. (1998) *J. Biol. Chem.* 273, 20551-20555.
14. Wong, B.R. et al. (1998) *J. Biol. Chem.* 273, 28355-28359.
15. Khursigara, G. et al. (1999) *J. Biol. Chem.* 274, 2597-2600.
16. Ninomiya-Tsuji, J. et al. (1999) *Nature* 398, 252-256.
17. Wong, B.R. et al. (1999) *Mol. Cell* 4, 1041-1049.

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**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.**Limited Uses**

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.