

#### **Goat Anti-TRAF2 Antibody**

Peptide-affinity purified goat antibody Catalog # AF2106a

### **Specification**

# **Goat Anti-TRAF2 Antibody - Product Information**

Application WB, IHC Primary Accession Q12933

Other Accession NP 066961, 7186, 22030 (mouse)

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG Calculated MW 55859

## **Goat Anti-TRAF2 Antibody - Additional Information**

#### **Gene ID 7186**

#### **Other Names**

TNF receptor-associated factor 2, 6.3.2.-, E3 ubiquitin-protein ligase TRAF2, Tumor necrosis factor type 2 receptor-associated protein 3, TRAF2, TRAP3

#### **Format**

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-TRAF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-TRAF2 Antibody - Protein Information**

Name TRAF2 {ECO:0000303|PubMed:28489822, ECO:0000312|HGNC:HGNC:12032}

#### **Function**

E3 ubiquitin-protein ligase that regulates activation of NF- kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis (PubMed:<a

href="http://www.uniprot.org/citations/10346818" target="\_blank">10346818</a>, PubMed:<a href="http://www.uniprot.org/citations/11784851" target="\_blank">11784851</a>, PubMed:<a href="http://www.uniprot.org/citations/12917689" target="\_blank">12917689</a>, PubMed:<a



href="http://www.uniprot.org/citations/15383523" target=" blank">15383523</a>, PubMed:<a href="http://www.uniprot.org/citations/18981220" target="blank">18981220</a>, PubMed:<a href="http://www.uniprot.org/citations/19150425" target="\_blank">19150425</a>, PubMed:<a href="http://www.uniprot.org/citations/19810754" target="\_blank">19810754</a>, PubMed:<a href="http://www.uniprot.org/citations/19918265" target="blank">19918265</a>, PubMed:<a href="http://www.uniprot.org/citations/19937093" target="blank">19937093</a>, PubMed:<a href="http://www.uniprot.org/citations/20047764" target=" blank">20047764</a>, PubMed:<a href="http://www.uniprot.org/citations/20064526" target="blank">20064526</a>, PubMed:<a href="http://www.uniprot.org/citations/20385093" target="blank">20385093</a>, PubMed:<a href="http://www.uniprot.org/citations/20577214" target="\_blank">20577214</a>, PubMed:<a href="http://www.uniprot.org/citations/22212761" target="blank">22212761</a>). Catalyzes 'Lys-63'-linked ubiquitination of target proteins, such as BIRC3, IKBKE, MLST8, RIPK1 and TICAM1 (PubMed:<a href="http://www.uniprot.org/citations/23453969" target=" blank">23453969</a>, PubMed:<a href="http://www.uniprot.org/citations/28489822" target=" blank">28489822</a>). Is an essential constituent of several E3 ubiquitin- protein ligase complexes, where it promotes the ubiquitination of target proteins by bringing them into contact with other E3 ubiquitin ligases  $\label{lem:conditions} $$(PubMed:<a href="http://www.uniprot.org/citations/15383523" target="_blank">15383523</a>, $$PubMed:<a href="http://www.uniprot.org/citations/18981220" target="_blank">18981220</a>).$ Regulates BIRC2 and BIRC3 protein levels by inhibiting their autoubiquitination and subsequent degradation; this does not depend on the TRAF2 RING-type zinc finger domain (PubMed: <a href="http://www.uniprot.org/citations/11907583" target=" blank">11907583</a>, PubMed:<a href="http://www.uniprot.org/citations/19506082" target="blank">19506082</a>). Plays a role in mediating activation of NF-kappa-B by EIF2AK2/PKR (PubMed: <a href="http://www.uniprot.org/citations/15121867" target=" blank">15121867</a>). In complex with BIRC2 or BIRC3, promotes ubiquitination of IKBKE (PubMed: <a href="http://www.uniprot.org/citations/23453969" target=" blank">23453969</a>). Acts as a regulator of mTORC1 and mTORC2 assembly by mediating 'Lys-63'-linked ubiquitination of MLST8, thereby inhibiting formation of the mTORC2 complex, while facilitating assembly of the mTORC1 complex (PubMed:<a href="http://www.uniprot.org/citations/28489822" target=" blank">28489822</a>). Required for normal antibody isotype switching from IgM to IgG (By similarity).

**Cellular Location** Cytoplasm

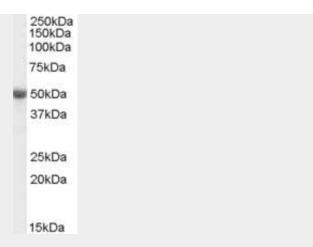
# Goat Anti-TRAF2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

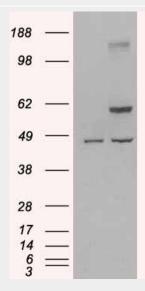
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Goat Anti-TRAF2 Antibody - Images

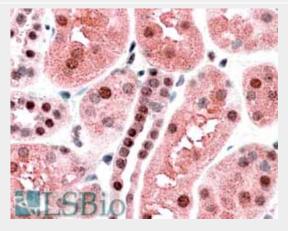




AF2106a (0.1  $\mu$ g/ml) staining of Human Ovary lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2106a HEK293 overexpressing Human TRAF2 (RC208110) and probed with (mock transfection in first lane), tested by Origene.



AF2106a (3.8  $\mu$ g/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

## Goat Anti-TRAF2 Antibody - Background

The protein encoded by this gene is a member of the TNF receptor associated factor (TRAF) protein





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family. TRAF proteins associate with, and mediate the signal transduction from members of the TNF receptor superfamily. This protein directly interacts with TNF receptors, and forms a heterodimeric complex with TRAF1. This protein is required for TNF-alpha-mediated activation of MAPK8/INK and NF-kappaB. The protein complex formed by this protein and TRAF1 interacts with the inhibitor-of-apoptosis proteins (IAPs), and functions as a mediator of the anti-apoptotic signals from TNF receptors. The interaction of this protein with TRADD, a TNF receptor associated apoptotic signal transducer, ensures the recruitment of IAPs for the direct inhibition of caspase activation. BIRC2/c-IAP1, an apoptosis inhibitor possessing ubiquitin ligase activity, can unbiquitinate and induce the degradation of this protein, and thus potentiate TNF-induced apoptosis. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of only one transcript has been determined.

#### Goat Anti-TRAF2 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Sphingosine-1-phosphate is a missing cofactor for the E3 ubiquitin ligase TRAF2. Alvarez SE, et al. Nature, 2010 Jun 24. PMID 20577214.

Competition between TRAF2 and TRAF6 regulates NF-kappaB activation in human B lymphocytes. Zhang W, et al. Chin Med Sci J, 2010 Mar. PMID 20449947.

Asymmetric recruitment of cIAPs by TRAF2. Mace PD, et al. | Mol Biol, 2010 Jul 2. PMID 20447407. Crystal structures of the TRAF2: cIAP2 and the TRAF1: TRAF2: cIAP2 complexes: affinity, specificity, and regulation. Zheng C, et al. Mol Cell, 2010 Apr 9. PMID 20385093.