

Anti-TRAF2 (RABBIT) Antibody TRAF2 Antibody Catalog # ASR5473

## **Specification**

# Anti-TRAF2 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, E, I, LCI Rabbit Anti-TRAF2 Antibody has been tested in ELISA and Western Blot. Positive control HeLa Whole Cell lysate (p/n W09-000-364) expect ~47kDa. Specific conditions for reactivity should be optimized by the end user.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region human TRAF2.
Preservative	0.01% (w/v) Sodium Azide

### Anti-TRAF2 (RABBIT) Antibody - Additional Information

Gene ID 7186

Other Names 7186

#### **Purity**

This affinity purified antibody is directed against human TRAF2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is predicted to react with TRAF2 from human and mouse sources based on a 100% homology with the immunizing sequence. Reactivity with TRAF2 from other sources has not been determined.

#### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.



# Anti-TRAF2 (RABBIT) Antibody - Protein Information

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

**Function** 

E3 ubiguitin-protein ligase that regulates activation of NF- kappa-B and INK 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 ubiguitination 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 (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 autoubiguitination 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 ubiguitination 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

# Anti-TRAF2 (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-TRAF2 (RABBIT) Antibody - Images



Western blot using Rockland's affinity purified anti-TRAF2 antibody shows detection of endogenous TRAF2 at ~47kDa (arrowhead). Lane 1 and 3: molecular weight markers. Lane 2: whole HeLa cell lysates (p/n W09-000-364). The identity of lower molecular weight band in lane 2 is unknown. Lane 4: incubated with immunizing peptide. Briefly, each lane contains approximately 14  $\mu$ g of lysate. Membranes were blocked in 3% BSA-TBS 30 min. at room temperature. Primary antibody was used at a 1:500 dilution in 3% BSA-TBS and reacted overnight at 4°C. The membrane was washed and reacted with a 1:20,000 dilution conjugated Gt-a-Rabbit DyLight 649 (p/n 611-143-122) for 1 hr at room temperature. Molecular weight estimation was made by comparison to prestained MW markers in lanes 1 and 3. Fluorescence image was captured using the VersaDoc® Imaging System developed by Bio-Rad.

### Anti-TRAF2 (RABBIT) Antibody - Background

TRAF2, or Tumor Necrosis factor (TNF) Receptor-Associated Factor 2, is an adapter protein and signal transducer that links members of the tumor necrosis factor receptor family to different signaling pathways by association with the receptor cytoplasmic domain and kinases. Association to the receptor is also mediated by the interaction with TRADD. TRAF2 mediates activation of NF-kappa-B and MAPK8/JNK and is involved in apoptosis. TRAF2 forms a heterodimeric complex with TRAF1, which then recruits the inhibitor-of-apoptosis proteins (IAPs), apoptotic suppressors BIRC2 and BIRC3 to TNFRSF1B/TNFR2 for the inhibition of caspase activation. In this way it functions as a mediator of the anti-apoptotic signals from TNF receptors. 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. TRAF2 may be involved in IL-15 signaling. Multiple alternatively spliced transcript variants exist, but the biological validity of only one transcript has been determined.