abcam

ab217033

Anti-TRAF3 antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 48.98% TBS, 1X, 1% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human TRAF3 aa 100-200 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link Q13114
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/100 - 1/500
Notes	-

Species	Human
Dilution info	1/100 - 1/500

Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information TRAF3

Function	Cytoplasmic E3 ubiquitin ligase that regulates various signaling pathways, such as the NF-kappa-B, mitogen-activated protein kinase (MAPK) and interferon regulatory factor (IRF) pathways, and thus controls a lot of biological processes in both immune and non-immune cell types (PubMed:33148796, PubMed:33608556). In TLR and RLR signaling pathways, acts as an E3 ubiquitin ligase promoting the synthesis of 'Lys-63'-linked polyubiquitin chains on several substrates such as ASC that lead to the activation of the type I interferon response or the inflammasome

(PubMed:25847972, PubMed:27980081). Following the activation of certain TLRs such as TLR4, acts as a negative NF-kappa-B regulator, possibly to avoid unregulated inflammatory response, and its degradation via 'Lys-48'-linked polyubiquitination is required for MAPK activation and production of inflammatory cytokines. Alternatively, when TLR4 orchestrates bacterial expulsion, TRAF3 undergoes 'Lys-33'-linked polyubiquitination and subsequently binds to RALGDS, mobilizing the exocyst complex to rapidly expel intracellular bacteria back for clearance (PubMed:27438768). Also acts as a constitutive negative regulator of the alternative NF-kappa-B pathway, which controls B-cell survival and lymphoid organ development. Required for normal antibody isotype switching from IgM to IgG. Plays a role T-cell dependent immune responses. Down-regulates proteolytic processing of NFKB2, and thereby inhibits non-canonical activation of NF-kappa-B. Promotes ubiquitination and proteasomal degradation of MAP3K14.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TRAF3 also known as TNF receptor-associated factor 3 weighs approximately 63 kDa. This adaptor protein is expressed in many tissues including lymphoid organs and the spleen. Mechanically TRAF3 interacts with the tumor necrosis factor receptor (TNFR) superfamily serving as a pivotal mediator in transducing signals. The protein engages directly with cytoplasmic domains of receptors relaying information downstream to influence cellular responses.
Biological function summary	The protein TRAF3 influences immune response regulation and lymphocyte activation by being part of signaling complexes. It binds with other TRAF family members forming multimeric structures for modulating NF-kB and MAPK pathways. TRAF3 plays a role in both adaptive and innate immune mechanisms controlling cell survival signals and apoptosis. Its activity impacts B-cell and T-cell functions further emphasizing its role in immune cell dynamics.

Pathways	TRAF3 significantly impacts NF-kB activation and MAP kinase signaling. It cooperates with other proteins like TRAF2 and NIK to modulate these pathways. The NF-kB pathway important for immune and inflammatory responses involves TRAF3 in negatively regulating this pathway by targeting NIK for degradation. Similarly in the MAPK signaling TRAF3 influences response to environmental stresses.
Associated diseases and disorders	TRAF3 connects to conditions such as autoimmune diseases and lymphoma. In autoimmune diseases the improper function of TRAF3 affects immune tolerance leading to abnormal B-cell activity. In lymphomas TRAF3 mutations can result in loss of function contributing to the development of B-cell malignancies. Interactions with proteins like TRAF2 in these disorders illustrate its significance in pathology and potential targeting in therapeutic interventions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

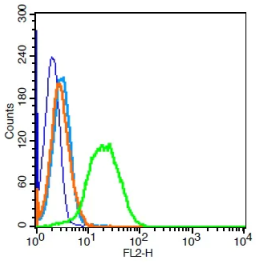
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

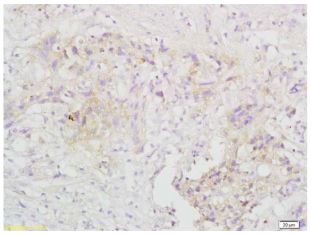
3 product images



Flow Cytometry (Intracellular) - Anti-TRAF3 antibody (ab217033)

TRAF3 Flow Cytometry (Intracellular) staining using rabbit Anti-TRAF3 antibody

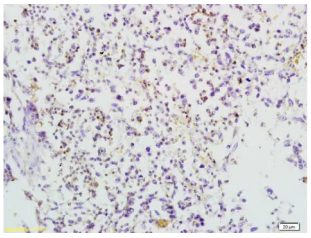
Intracellular flow cytometric analysis of Jurkat cellslabeling TRAF3 with ab217033 at 0.2µg for 30 minutes followed by incubation with a PE Conjugated secondary for 30 minutes (green), compared to control cells (blue), secondary only (light blue) and isotype control (orange).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRAF3 antibody (ab217033)

TRAF3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TRAF3 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human gastric carcinoma tissue labeling TRAF3 with ab217033 at 1/200 dilution, followed by secondary antibody detection and DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRAF3 antibody (ab217033)

TRAF3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TRAF3 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse lymphoma tissue labeling TRAF3 with ab217033 at 1/200 dilution, followed by secondary antibody detection and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.