abcam

ab13597

Anti-TNFAIP3 antibody [59A426]

KO Validated

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human TNFAIP3. Database link P21580
Clone number	59A426
Purification technique	Affinity purification Protein G
Epitope	The epitope has been mapped to the C-terminal portion of A20, amino acids 440-790.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	2-4 µg/mL

Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1-2 µg/cells for 6 µg/cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ICC

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information TNFAIP3

Function	Ubiquitin-editing enzyme that contains both ubiquitin ligase and deubiquitinase activities. Involved in immune and inflammatory responses signaled by cytokines, such as TNF and IL-1 beta, or pathogens via Toll-like receptors (TLRs) through terminating NF-kappa-B activity. Essential component of a ubiquitin-editing protein complex, comprising also RNF11, ITCH and TAX1BP1, that ensures the transient nature of inflammatory signaling pathways. In cooperation with TAX1BP1 promotes disassembly of E2-E3 ubiquitin protein ligase complexes in IL-1R and TNFR-1 pathways; affected are at least E3 ligases TRAF6, TRAF2 and BIRC2, and E2 ubiquitin-conjugating enzymes UBE2N and UBE2D3. In cooperation with TAX1BP1 promotes ubiquitination of UBE2N and proteasomal degradation of UBE2N and

UBE2D3. Upon TNF stimulation, deubiquitinates 'Lys-63'-polyubiquitin chains on RIPK1 and catalyzes the formation of 'Lys-48'-polyubiquitin chains. This leads to RIPK1 proteasomal degradation and consequently termination of the TNF- or LPS-mediated activation of NF-kappa-B. Deubiquitinates TRAF6 probably acting on 'Lys-63'-linked polyubiquitin. Upon T-cell receptor (TCR)-mediated T-cell activation, deubiquitinates 'Lys-63'-polyubiquitin chains on MALT1 thereby mediating disassociation of the CBM (CARD11:BCL10:MALT1) and IKK complexes and preventing sustained IKK activation. Deubiquitinates NEMO/IKBKG; the function is facilitated by TNIP1 and leads to inhibition of NF-kappa-B activation. Upon stimulation by bacterial peptidoglycans, probably deubiquitinates RIPK2. Can also inhibit I-kappa-B-kinase (IKK) through a non-catalytic mechanism which involves polyubiquitin; polyubiquitin promotes association with IKBKG and prevents IKK MAP3K7-mediated phosphorylation. Targets TRAF2 for lysosomal degradation. In vitro able to deubiquitinate 'Lys-11'-, 'Lys-48'- and 'Lys-63' polyubiquitin chains. Inhibitor of programmed cell death. Has a role in the function of the lymphoid system. Required for LPS-induced production of pro-inflammatory cytokines and IFN beta in LPS-tolerized macrophages.

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

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.

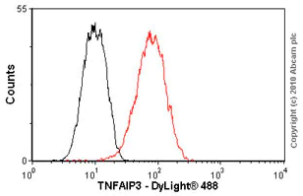
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

---

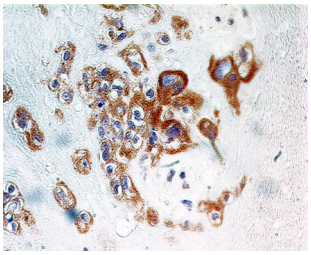
6 product images



Flow Cytometry (Intracellular) - Anti-TNFAIP3 antibody [59A426] (ab13597)

TNFAIP3 Flow Cytometry (Intracellular) staining using mouse Anti-TNFAIP3 antibody

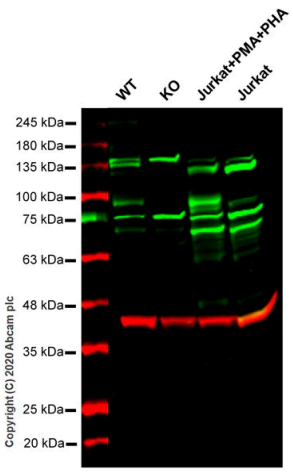
Overlay histogram showing HepG2 cells stained with ab13597 (red line). The cells were fixed with methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab13597, 2µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a decreased signal in HepG2 cells fixed with methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TNFAIP3 antibody [59A426] (ab13597)

TNFAIP3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-TNFAIP3 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human placenta tissue labelling TNFAIP3 with ab13597 at 5µg/ml. Staining was enhanced by boiling tissue sections in 10mM sodium citrate buffer, pH6.0 for 10-20 minutes followed by cooling at room temperature for 20 minutes.



Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597)

TNFAIP3 Western blot staining using mouse Anti-TNFAIP3 antibody

Lanes 1-4: Merged signal (red and green). Green - ab13597 observed at 80 kDa. Red - loading control, ab181602 observed at 37 kDa.
ab13597 Anti-TNFAIP3 antibody [59A426] was shown to specifically react with TNFAIP3 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265983 (knockout cell lysate ab257112) was used. Wild-type and TNFAIP3 knockout samples were subjected to SDS-PAGE. ab13597 and Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (ab216777) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597) at 1/500 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
TNFAIP3 knockout HeLa cell lysate at 20 µg

Lane 2:
Western blot - Human TNFAIP3 knockout HeLa cell line (ab265983)

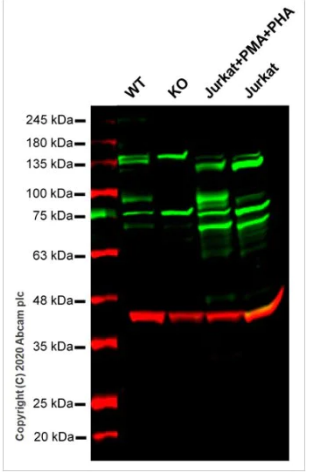
Lane 3:
Jurkat cell treated with 5ng/ml PMA for 48 hours and then treated with 2µg/ml PHA for 48 hours, whole cell lysate at 20 µg

Lane 4:
Untreated Jurkat cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 89 kDa

Observed band size: 80 kDa



Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597)

TNFAIP3 Western blot staining using mouse Anti-TNFAIP3 antibody

Lanes 1-4: Merged signal (red and green). Green - ab13597 observed at 80 kDa. Red - loading control, ab181602 observed at 37 kDa.
ab13597 Anti-TNFAIP3 antibody [59A426] was shown to specifically react with TNFAIP3 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265983 (knockout cell lysate ab257112) was used. Wild-type and TNFAIP3 knockout samples were subjected to SDS-PAGE. ab13597 and Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (ab216777) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597) at 1/500 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
TNFAIP3 knockout HeLa cell lysate at 20 µg

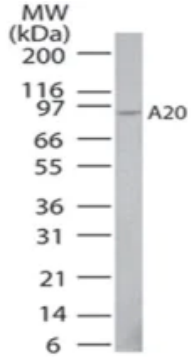
Lane 3:
Jurkat cell treated with 5ng/ml PMA for 48 hours and then treated with 2µg/ml PHA for 48 hours, whole cell lysate at 20 µg

Lane 4:
Untreated Jurkat cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 89 kDa

Observed band size: 80 kDa

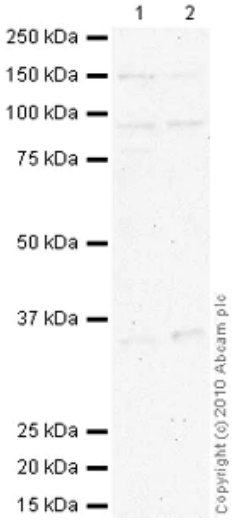


Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597)

All lanes:
Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597) at 4 µg/mL

All lanes:
Jurkat cell lysate

Predicted band size: 89 kDa



Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597)

TNFAIP3 Western blot staining using mouse Anti-TNFAIP3 antibody

All lanes:
Western blot - Anti-TNFAIP3 antibody [59A426] (ab13597) at 1 µg/mL

Lane 1:
Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate at 10 µg

Lane 2:
HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 89 kDa

Observed band size: 15 kDa, 34 kDa, 90 kDa

Exposure time: 20min

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