

# Product datasheet

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# ARG40551 anti-TNFAIP3 / A20 antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes TNFAIP3 / A20

Tested Reactivity Hu, Ms, Rat

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name TNFAIP3 / A20

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-190 of Human TNFAIP3 / A20 (NP\_006281.1).

Conjugation Un-conjugated

Alternate Names A20; OTUD7C; EC 6.3.2.-; Zinc finger protein A20; Tumor necrosis factor alpha-induced protein 3;

Putative DNA-binding protein A20; TNFA1P2; OTU domain-containing protein 7C; TNF alpha-induced

protein 3; EC 3.4.19.12

## **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	SW480	
Observed Size	80 kDa	

#### **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Bioinformation

Gene Symbol

TNFAIP3

Gene Full Name

tumor necrosis factor, alpha-induced protein 3

Background

This gene was identified as a gene whose expression is rapidly induced by the tumor necrosis factor (TNF). The protein encoded by this gene is a zinc finger protein and ubiquitin-editing enzyme, and has been shown to inhibit NF-kappa B activation as well as TNF-mediated apoptosis. The encoded protein, which has both ubiquitin ligase and deubiquitinase activities, is involved in the cytokine-mediated immune and inflammatory responses. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2012]

Function

Ubiquitin-editing enzyme that contains both ubiquitin ligase and deubiquitinase activities. Involved in immune and inflammatory responses signaled by cytokines, such as TNF-alpha 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 proinflammatory cytokines and IFN beta in LPStolerized macrophages. [UniProt]

Calculated Mw

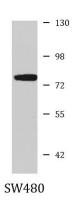
90 kDa

PTM

Proteolytically cleaved by MALT1 upon TCR stimulation; disrupts NF-kappa-B inhibitory function and results in increased IL-2 production. It is proposed that only a fraction of TNFAIP3 colocalized with TCR and CBM complex is cleaved, leaving the main TNFAIP3 pool intact. [UniProt]

Cellular Localization

Cytoplasm. Nucleus. Lysosome. A20p50: Cytoplasm. [UniProt]



## ARG40551 anti-TNFAIP3 / A20 antibody WB image

Western blot: 25  $\mu g$  of SW480 cell lysate stained with ARG40551 anti-TNFAIP3 / A20 antibody at 1:1000 dilution.