10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRIM30 Antibody

Catalog # ASC10743

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P15533
Other Accession	NP_033125, 125347379
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	57330
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TRIM30 antibody can be used for detection of TRIM30 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	20128
Other Names	Tripartite motif-containing protein 30A, Down regulatory protein of interleukin-2 receptor, Tripartite motif-containing protein 30, Trim30a, Rpt-1, Rpt1, Trim30
Target/Specificity	Trim30;
Reconstitution & Storage	TRIM30 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TRIM30 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Trim30a
Synonyms	Rpt-1, Rpt1, Trim30
Function	E3 ubiquitin-protein ligase that acts as a negative regulator of innate immune responses, and which is required to prevent excessive inflammation (PubMed:18345001, PubMed:19147168, PubMed:21048113, PubMed:26114947). Negatively regulates Toll-like receptor (TLR)- mediated activation of NF-kappa-B by promoting ubiquitination and degradation of TAB2 and TAB3 and preventing TRAF6 autoubiquitination (PubMed:18345001).

	Negatively regulates production of reactive oxygen species (ROS) which inhibits activation of the NLRP3 inflammasome complex (PubMed:21048113). This, in turn, regulates activation of CASP1 and subsequent cleavage of IL1B and IL18 (PubMed:21048113). Acts as a negative regulator of cGAS-STING signaling by mediating ubiquitination and degradation of STING1 (PubMed:26114947).
Cellular Location	Cytoplasm. Nucleus.
Tissue Location	Highly expressed in spleen and lymph nodes (at protein level).

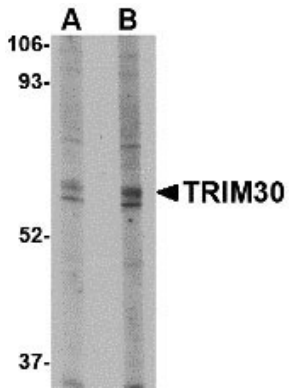
Background

TRIM30 Antibody: TRIM30 belongs to a family of the tripartite motif (TRIM) proteins involved in the regulation of cell proliferation, differentiation, development, oncogenesis, apoptosis and antiviral responses. The TRIM protein family is an expanding family of RING ('really interesting new gene') proteins, also known as RBCC proteins as they contain an RBCC motif, which comprises a RING domain, one or two B-boxes and a predicted coiled-coil region. Studies have shown that some TRIM family members are critical to innate immunity; TRIM5, TRIM19 and TRIM25, for example, have been shown to restrict viral infection. A recent study shows that TRIM30 functions as a negative modulator of the TLR signaling pathway, by targeting TAB2 and TAB3, and contributes to the inhibition of TLR-mediated NF-κB activation. The importance of TRIM30 in the attenuation or termination of NF-κB activation suggests that targeting of TAB2 and TAB3 by TRIM30alpha may be a mechanism for modulating many types of immune responses.

References

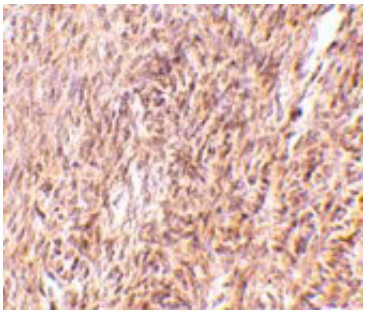
Nisole S, Stoye JP, and Saib A. TRIM family proteins: retroviral restriction and antiviral defence. Nat. Rev. Microbiol.2005; 3:799-808.
Sakuma R, Noser JA, Ohmine S, et al. Rhesus monkey TRIM5 alpha restricts HIV-1 production through rapid degradation of viral Gag polyproteins. Nat. Med.2007; 13:631-635.
Gack MU, Shin YC, Joo CH, et al. TRIM25 RING-finger E3 ubiquitin ligase is essential for RIG-I-mediated antiviral activity. Nature2007; 446:916-920.
Patarca R, Freeman GJ, Schwartz J, et al. rpt-1, an intracellular protein from helper/inducer T cells that regulates gene expression of interleukin 2 receptor and human immunodeficiency virus type 1. Proc. Natl. Acad. Sci. USA1988; 85:2733-7.

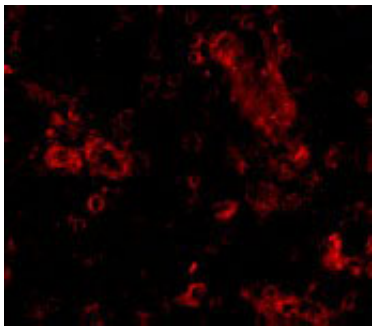
Images



Western blot analysis of TRIM30 in mouse heart tissue lysate with TRIM30 antibody at (A) 1 and (B) 2 µg/mL.

Immunohistochemistry of TRIM30 in mouse ovary tissue with TRIM30 antibody at 10 µg/mL.





Immunofluorescence of TRIM30 in Human Ovary cells with TRIM30 antibody at 20 µg/mL.

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