

TRIM7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11979a

Specification

TRIM7 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9C029</u> <u>O923T7</u>, <u>NP_203128.1</u> Human Mouse Rabbit Polyclonal Rabbit IgG 56631 67-95

TRIM7 Antibody (N-term) - Additional Information

Gene ID 81786

Other Names Tripartite motif-containing protein 7, Glycogenin-interacting protein, RING finger protein 90, TRIM7, GNIP, RNF90

Target/Specificity

This TRIM7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-95 amino acids from the N-terminal region of human TRIM7.

Dilution WB~~1:2000 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TRIM7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM7 Antibody (N-term) - Protein Information



Name TRIM7

Synonyms GNIP, RNF90

Function E3 ubiquitin-protein ligase that have both tumor-promoting and tumor-suppressing activities and functions in several biological processes including innate immunity, regulation of ferroptosis as well as cell proliferation and migration (PubMed:25851810, PubMed:32853985, PubMed: <u>34062120</u>). Acts as an antiviral effector against multiple viruses by targeting specific viral proteins for ubiquitination and degradation including norovirus NTPase protein or SARS-CoV-2 NSP5 and NSP8 proteins (PubMed: 34062120, PubMed: 35982226). Mechanistically, recognizes the C-terminal glutamine-containing motif usually generated by viral proteases that process the polyproteins and trigger their ubiquitination and subsequent degradation (PubMed: 35867826, PubMed: 35893676, PubMed: 35982226). Mediates 'Lys-63'-linked polyubiquitination and stabilization of the JUN coactivator RNF187 in response to growth factor signaling via the MEK/ERK pathway, thereby regulating JUN transactivation and cellular proliferation (PubMed: 25851810). Promotes the TLR4-mediated signaling activation through its E3 ligase domain leading to production of pro-inflammatory cytokines and type I interferon (By similarity). Also plays a negative role in the regulation of exogenous cytosolic DNA virus-triggered immune response. Mechanistically, enhances the 'Lys-48'-linked ubiquitination of STING1 leading to its proteasome-dependent degradation (PubMed: 32126128). Mediates the ubiquitination of the SIN3-HDAC chromatin remodeling complex component BRMS1 (PubMed: 32853985). Modulates NCOA4-mediated ferritinophagy and ferroptosis in glioblastoma cells by ubiguitinating NCOA4, leading to its degradation (PubMed: 36067704).

Cellular Location Nucleus. Cytoplasm. Golgi apparatus

Tissue Location

Skeletal muscle and placenta, at lower levels in heart, brain and pancreas. Isoform 1 is widely expressed with high level in testis, kidney and heart.

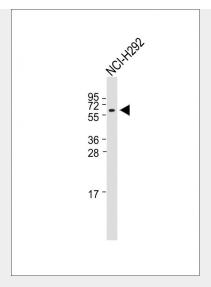
TRIM7 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TRIM7 Antibody (N-term) - Images





Anti-TRIM7 Antibody (N-term) at 1:2000 dilution + NCI-H292 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TRIM7 Antibody (N-term) (Cat. #AP11979a)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TRIM7 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

TRIM7 Antibody (N-term) - Background

The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1, a B-box type 2, and a coiled-coil region. The protein localizes to both the nucleus and the cytoplasm, and may represent a participant in the initiation of glycogen synthesis. Multiple transcript variants have been found for this gene, and some of them encode the same isoform. [provided by RefSeq].

TRIM7 Antibody (N-term) - References

Zhai, L., et al. Arch. Biochem. Biophys. 421(2):236-242(2004) Skurat, A.V., et al. J. Biol. Chem. 277(22):19331-19338(2002) Reymond, A., et al. EMBO J. 20(9):2140-2151(2001)