

TRIM71 Antibody

Catalog # ASC11183

Specification

TRIM71 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>O2O1W2</u> NP_001034200, 84993742 Human, Mouse, Rat Rabbit Polyclonal IgG TRIM71 antibody can be used for detection of TRIM71 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

TRIM71 Antibody - Additional Information

Gene ID Target/Specificity TRIM71; 131405

Reconstitution & Storage

TRIM71 antibody can be stored at 4°C for three months and -20°C, 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 TRIM71 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM71 Antibody - Protein Information

Name TRIM71 (<u>HGNC:32669</u>)

Synonyms LIN41

Function

E3 ubiquitin-protein ligase that cooperates with the microRNAs (miRNAs) machinery and promotes embryonic stem cells proliferation and maintenance (Probable). Binds to miRNAs and associates with AGO2, participating in post-transcriptional repression of transcripts such as CDKN1A (By similarity). In addition, participates in post-transcriptional mRNA repression in a miRNA independent mechanism (PubMed:23125361). Facilitates the G1-S transition to promote rapid embryonic stem cell self-renewal by repressing CDKN1A expression. Required to maintain proliferation and prevent premature differentiation of neural progenitor cells during early neural development: positively regulates FGF signaling by controlling the stability of SHCBP1 (By similarity). Specific regulator of



miRNA biogenesis. Binds to miRNA MIR29A hairpin and postranscriptionally modulates MIR29A levels, which indirectly regulates TET proteins expression (PubMed:28431233).

Cellular Location Cytoplasm, P-body

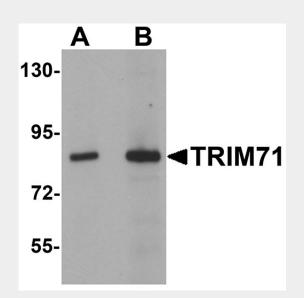
Tissue Location Specifically expressed in testis.

TRIM71 Antibody - Protocols

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

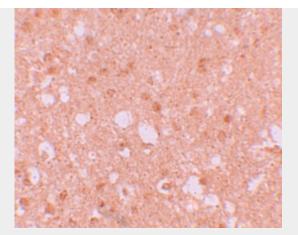
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TRIM71 Antibody - Images

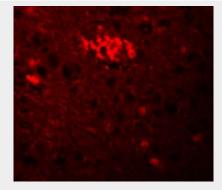


Western blot analysis of TRIM71 in human brain tissue lysate with TRIM71 antibody at (A) 1 and (B) 2 μ g/mL.





Immunohistochemistry of TRIM71 in human brain tissue with TRIM71 antibody at 5 μ g/mL.



Immunofluorescence of TRIM71 in Human Brain cells with TRIM71 antibody at 20 μ g/mL.

TRIM71 Antibody - Background

TRIM71 Antibody: TRIM71 is the mammalian ortholog to the C. elegans heterochronic protein Lin41, a protein that is thought to be important in postembryonic development, and is genetically and biochemically downstream of both Shh and Fgf signaling pathways. Similar to its C. elegans homolog, TRIM71 is a target of the microRNA let-7 and is likely to play a role in mammalian development. Recent experiments have indicated that TRIM71 is an E3 ubiquitin ligase and can interact with the Dicer and the Argonaute proteins Ago1, Ago2, and Ago4. Overexpression and depletion of TRIM71 led to inverse changes in Ago2 protein levels, suggesting TRIM71 can regulate Ago2 turnover. Finally, TRIM71 cooperates with the pluripotency factor Lin-28 in regulating let-7.

TRIM71 Antibody - References

Lancman JJ, Caruccio NC, Harfe BD, et al. Analysis of the regulation of lin-41 during chick and mouse limb development. Dev. Dyn.2005; 234:948-60.

Lin YC, Hsieh LC, Kuo MW, et al. Human TRIM71 and its nematode homologue are targets of let-7 microRNA and its zebrafish orthologue is essential for development. Mol. Biol. Evol.2007; 24:2525-34.

Rybak A, Fuchs H, Hadian K, et al. The let-7 target gene mouse lin-41 is a stem cell specific E3 ubiquitin ligase for the miRNA pathway protein Ago2. Nat. Cell Biol.2009; 11:1411-20.