

TRIM33 / TIF1-Gamma Antibody (Internal) Rabbit Polyclonal Antibody Catalog # ALS16027

Specification

TRIM33 / TIF1-Gamma Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IF, IHC <u>O9UPN9</u> Human, Mouse, Rat Rabbit Polyclonal 123kDa KDa

TRIM33 / TIF1-Gamma Antibody (Internal) - Additional Information

Gene ID 51592

Other Names E3 ubiquitin-protein ligase TRIM33, 6.3.2.-, Ectodermin homolog, RET-fused gene 7 protein, Protein Rfg7, Transcription intermediary factor 1-gamma, TIF1-gamma, Tripartite motif-containing protein 33, TRIM33, KIAA1113, RFG7, TIF1G

Target/Specificity TRIM33 antibody is human, mouse and rat reactive. At least two isoforms of TRIM33 are known to exist.

Reconstitution & Storage Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions TRIM33 / TIF1-Gamma Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM33 / TIF1-Gamma Antibody (Internal) - Protein Information

Name TRIM33

Synonyms KIAA1113, RFG7, TIF1G

Function

Acts as an E3 ubiquitin-protein ligase. Promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway. According to PubMed:16751102, does not promote a decrease in the level of endogenous SMAD4. May act as a transcriptional repressor. Inhibits the transcriptional response to TGF-beta/BMP signaling cascade. Plays a role in the control of cell proliferation. Its association with SMAD2 and SMAD3 stimulates erythroid differentiation of hematopoietic stem/progenitor (By similarity). Monoubiquitinates SMAD4 and acts as an inhibitor of SMAD4-dependent TGF-beta/BMP signaling cascade (Monoubiquitination of SMAD4 hampers its



ability to form a stable complex with activated SMAD2/3 resulting in inhibition of TGF-beta/BMP signaling cascade).

Cellular Location

Nucleus. Note=In discrete nuclear dots resembling nuclear bodies (By similarity). Localizes to sites of DNA damage (PubMed:25593309). {ECO:0000250|UniProtKB:Q99PP7, ECO:0000269|PubMed:25593309}

Tissue Location

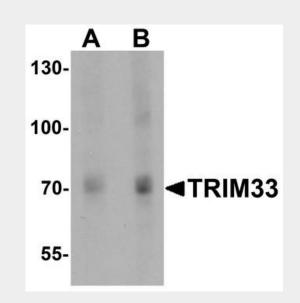
Expressed in stem cells at the bottom of the crypts of the colon (at protein level). Expressed in colon adenomas and adenocarcinomas (at protein level). Expressed in brain, lung, liver, spleen, thymus, prostate, kidney, testis, heart, placenta, pancreas, small intestine, ovary, colon, skeletal muscle and hematopoietic progenitors

TRIM33 / TIF1-Gamma Antibody (Internal) - Protocols

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

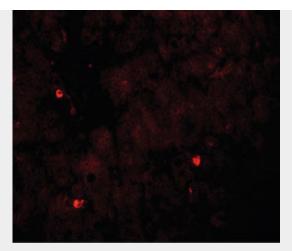
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TRIM33 / TIF1-Gamma Antibody (Internal) - Images

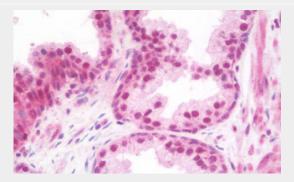


Western blot analysis of TRIM33 in human liver tissue lysate with TRIM33 antibody at (A) 1 and...





Immunofluorescence of TRIM33 in human liver tissue with TRIM33 antibody at 20 ug/ml.



Anti-TRIM33 / TIF1-Gamma antibody IHC staining of human prostate.

TRIM33 / TIF1-Gamma Antibody (Internal) - Background

Acts as an E3 ubiquitin-protein ligase. Promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway. According to PubMed:16751102, does not promote a decrease in the level of endogenous SMAD4. May act as a transcriptional repressor. Inhibits the transcriptional response to TGF-beta/BMP signaling cascade. Plays a role in the control of cell proliferation. Its association with SMAD2 and SMAD3 stimulates erythroid differentiation of hematopoietic stem/progenitor (By similarity). Monoubiquitinates SMAD4 and acts as an inhibitor of SMAD4-dependent TGF-beta/BMP signaling cascade (Monoubiquitination of SMAD4 hampers its ability to form a stable complex with activated SMAD2/3 resulting in inhibition of TGF- beta/BMP signaling cascade).

TRIM33 / TIF1-Gamma Antibody (Internal) - References

Venturini L.,et al.Oncogene 18:1209-1217(1999). Reymond A.,et al.EMBO J. 20:2140-2151(2001). Kikuno R.,et al.DNA Res. 6:197-205(1999). Gregory S.G.,et al.Nature 441:315-321(2006). Klugbauer S.,et al.Oncogene 18:4388-4393(1999).