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TIF1 gamma / TRIM33 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52681

Product Information

Application	WB
Primary Accession	Q9UPN9
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	122533

Additional Information

Gene ID	51592
Other Names	8030451N04Rik;AI413936;cb1085;DKFZp586K1123;E3 ubiquitin-protein ligase TRIM33;EC 6.3.2.-;Ectodermin;Ectodermin homolog;FLJ11429;FLJ32925;id:ibd2175;MGC136680;mKIAA1113; OTTHUMP00000013662;OTTHUMP00000013663;Protein Rfg7;PTC7;Ret fused gene 7;RET-fused gene 7 protein;RFG7;Rfg7 protein;TF1G;TIF1-gamma;TIF1G;TIF1GAMMA;TIFGAMMA;Transcription intermediary factor 1-gamma;Transcriptional intermediary factor 1 gamma;TRI33_HUMAN; Trim33;Tripartite motif containing 33;Tripartite motif containing 33 protein;tripartite motif-containing 33;Tripartite motif-containing protein 33;wu:fc17f10;zgc:136680.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

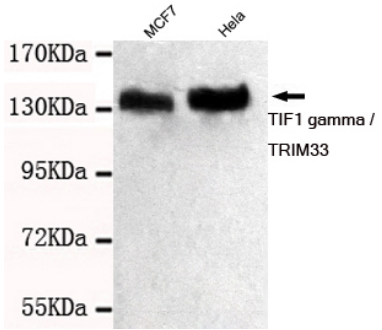
Background

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).

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).

Images



Western blot detection of TIF1 gamma / TRIM33 in MCF7 and HelaNE cell lysates using TIF1 gamma / TRIM33 mouse mAb (1:1000 diluted).Predicted band size: 120KDa.Observed band size: 140KDa.