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TIF1 gamma Rabbit pAb

Catalog # AP98237

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UPN9
Other Accession	Q9UPN9
Reactivity	Rat, Mouse
Predicted	Pig, Human, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	122533
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TIF1 gamma
Epitope Specificity	981-1127/1127
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the TRIM/RBCC family. Contains 2 B box-type zinc fingers.Contains 1 bromo domain.Contains 1 PHD-type zinc finger.Contains 1 RING-type zinc finger.
SUBUNIT	Homooligomer and heterooligomer with TRIM24 and TRIM28 family members. Interacts with SMAD4 in unstimulated cells. Found in a complex with SMAD2 and SMAD3 upon addition of TGF-beta. Interacts with SMAD2 and SMAD3. Interacts with SMAD4 under basal and induced conditions and, upon TGF-beta signaling, with activated SMAD2. Forms a ternary complex with SMAD4 and SMAD2 upon TGF-beta signaling.
DISEASE	Defects in TRIM33 are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells. Note=A chromosomal aberration involving TRIM33 is found in thyroid papillary carcinomas. Translocation t(1;10)(p13;q11) with RET. The translocation generates the TRIM33/RET (PTC7) oncogene.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	TIF1 gamma is a member of the Transcriptional Intermediary Factor 1 family, which serve as coactivators and corepressors. Its structure is similar to TIF1 alpha and TIF1 beta, exhibiting multiple domains (RING finger, coiled coil, B boxes, PHD/TTC, and bromodomain). TIF1 gamma functions in cell differentiation and development, playing a role in differentiation of hematopoietic cells.

Additional Information

Gene ID	51592
Other Names	DDH4; ECTO; PTC7; RFG7; TF1G; TIF1G; TIF1GAMMA; TIFGAMMA; 8030451N04Rik; TRI33_HUMAN; TRIM33; Ectodermin homolog; RET-fused gene 7 protein (Protein Rfg7); RING-type E3 ubiquitin transferase TRIM33; Transcription intermediary factor 1-gamma (TIF1-gamma); Tripartite motif-containing protein 33; 2.3.2.27; KIAA1113; TRI33_MOUSE; tripartite motif containing 33; tripartite motif-containing 33; transcriptional intermediary factor 1 gamma; ret-fused gene 7
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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