

## Rabbit Anti-TIF1 gamma/Cy5 Conjugated antibody

SL3582R-Cy5

<b>Product Name</b>	Anti-TIF1 gamma/Cy5
<b>Chinese Name</b>	Cy5 标记的转录中介因子 Tif1 $\gamma$ 抗体
<b>Alias</b>	Trim33; TIF1 gamma;RFG7; Rfg7 protein; TF1G; TIF1-gamma; TIF1G; TIF1G; TIF1GAMMA; TIFGAMMA; Transcription intermediary factor 1-gamma; Transcriptional intermediary factor 1 gamma; Trim 33; Tripartite motif containing 33; Tripartite motif containing 33 protein; tripartite motif-containing 33; Tripartite motif-containing protein 33; E3 ubiquitin-protein ligase TRIM33; Ectodermin homolog; Protein Rfg7; PTC7 antibody; Ret fused gene 7; RET-fused gene 7 protein; RFG7; KIAA1113; TRI33_HUMAN; Ectodermin homolog; RET-fused gene 7 protein; Protein Rfg7; Transcription intermediary factor 1-gamma.
<b>Research Area</b>	Tumour immunology Signal transduction transcriptional regulatory factor
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow,Horse) IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	124kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human TIF1 gamma(987-1048aa)
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH

7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**background:**

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.

**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).

**Product Detail**

**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.

**Subcellular Location:**

Nucleus. Note=In discrete nuclear dots resembling nuclear bodies.

**Tissue Specificity:**

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.

**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.

**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.

**Database links:**

[Entrez Gene: 51592](#) Human

[Entrez Gene: 94093](#) Mouse

[Entrez Gene: 365894](#) Rat

[Omim: 605769](#) Human

[SwissProt: Q9UPN9](#) Human

[SwissProt: Q99PP7](#) Mouse

[Unigene: 26837](#) Human

[Unigene: 195036](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.