

# Anti-TIF1 gamma Antibody (3H7-C8-B9)

Mouse Monoclonal Antibody Catalog # ABV12044

## **Product Information**

Application	WB
Primary Accession	<u>Q9UPN9</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Names	3H7-C8-B9
Calculated MW	122533

# **Additional Information**

Gene ID	51592
Application & Usage Other Names	WB: MCF7 and HeLa nuclear extracts TRIM33
Target/Specificity	TRIM33
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	In buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50%,glycerol
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions Precautions	Anti-TIF1 gamma Antibody (3H7-C8-B9) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **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: <u>16751102</u> , 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)

#### Images



Western blot detection of TIF1 gamma / TRIM33 in MCF7 and Hela nuclear extract using TIF1 gamma mouse mAb

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