

TRIM33 recombinant protein

Recombinant TRIM33 (959-1069) protein

CATALOG # AAA59639	HOST E Coli
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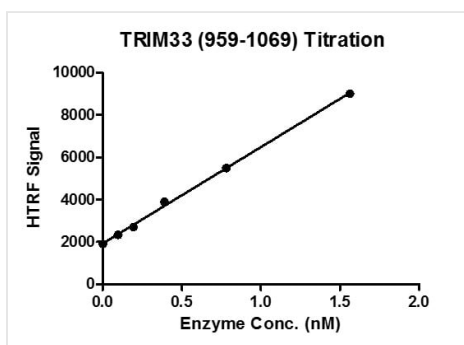
PRODUCT SYNONYMS

TRIM33; Recombinant TRIM33 (959-1069) protein; ECTO; PTC7; RFG7; TF1G; TIF1G; TIFGAMMA; TIF1GAMMA; TRIM33 recombinant protein

PRODUCT SPECIFICATIONS

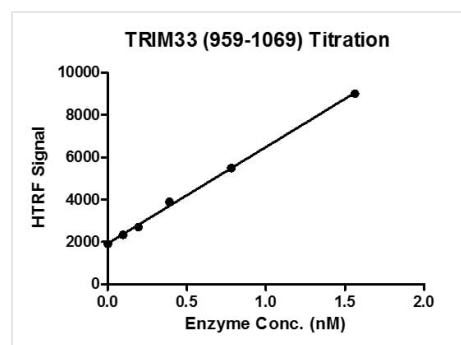
Host	E Coli
Purity/Purification	The recombinant protein is >90% pure by SDS-PAGE.
Form/Format	Recombinant TRIM33 (959-1069) protein expressed in E Coli and supplied in 25mM Tris-HCl 7.4, 300mM NaCl, 5% glycerol.
Protein Species	Human
Tag	DYKDDDDK-Tag, His-Tag
Notes	Recombinant TRIM33 (959-1069) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



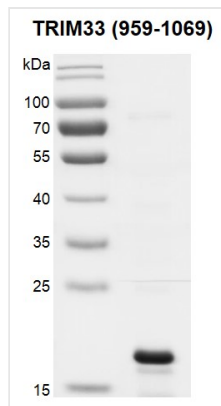
Application Data

Recombinant TRIM33 (959-1069) protein HTRF activity assay. 3 μ M H4K5/8/12/16 (ac4) peptide was incubated with different concentrations of TRIM33 (959- 1069) protein in a 10 μ l reaction system containing 50 mM HEPES-NaOH pH 7.4, 0.1% BSA for 1 hour, then 10 μ l DYKDDDDK antibody and SA-XL665 mixture (1:100 dilution in the same buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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SDS-PAGE

Recombinant TRIM33 (959-1069) protein gel. TRIM33 (959-1069) protein was run on a 12.5% SDS-PAGE gel and stained with Coomassie Blue. MW: 17.7 kDa Purity: >80%

ADDITIONAL INFORMATION

Related Product Information for TRIM33 recombinant protein

Short Description: The peptide corresponding to amino acids 959-1059 that contains the bromodomain sequences of TRIM33 (accession number NP_056990.3) was expressed in E Coli and contains an N-terminal His-tag and C-terminal DYKDDDDK tag with an observed molecular weight of 17.7 kDa. Tripartite motif-containing 33 (TRIM33) protein, also known as TIF1g, is a member of the transcriptional intermediary factor 1 (TIF1) family that control transcription and chromatin remodeling through their interaction with transcription factors. The family includes TRIM24 (TIF1a), TRIM28 (TIF1b) and TRIM33 (TIF1g) that share a characteristic domain structure comprised of multiple histone-binding domains, an N-terminal TRIM region (containing a RING domain, B box type 1 and type 2 domains, and a coiled-coil region), and a C-terminal bromodomain and PHD finger. Bromodomains function as 'readers' of epigenetic histone marks and regulate chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. TRIM33 is an E3 ubiquitin protein ligase that promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway. TRIM33 does not affect SMAD4 levels but rather acts as an inhibitor of the SMAD4-dependent TGFb/BMP signaling cascade by monoubiquitinating SMAD4 and hampering its ability to form a stable complex with activated SMAD2/3. TRIM33 may also act as a transcriptional corepressor. It has also been shown to associate with SMAD2 and SMAD3 and stimulate differentiation of hematopoietic stem cells. Additionally, TRIM33 associates with TRIM24 and plays a role in the control of cell proliferation. Recombinant TRIM33 (959-1069) can be used in binding assays and inhibitor screening.

Background: Tripartite motif-containing 33 (TRIM33) protein, also known as TIF1g, is a member of the transcriptional intermediary factor 1 (TIF1) family that control transcription and chromatin remodeling through their interaction with transcription factors. The family includes TRIM24 (TIF1a), TRIM28 (TIF1b) and TRIM33 (TIF1g) that share a characteristic domain structure comprised of multiple histone-binding domains, an N-terminal TRIM region (containing a RING domain, B box type 1 and type 2 domains, and a coiled-coil region), and a C-terminal bromodomain and PHD finger. Bromodomains function as 'readers' of epigenetic histone marks and regulate chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. TRIM33 is an E3 ubiquitin protein ligase that promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway. TRIM33 does not affect SMAD4 levels but rather acts as an inhibitor of the SMAD4-dependent TGFb/BMP signaling cascade by monoubiquitinating SMAD4 and hampering its ability to form a stable complex with activated SMAD2/3. TRIM33 may also act as a transcriptional corepressor. It has also been shown to associate with SMAD2 and SMAD3 and stimulate differentiation of hematopoietic stem cells. Additionally, TRIM33 associates with TRIM24 and plays a role in the control of cell proliferation.

Product Categories/Family for TRIM33 recombinant protein

[Recombinant Proteins](#); [Bromodomain](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	74027249
NCBI GeneID	51592
NCBI Accession #	NP_056990.3

NCBI GenBank Nucleotide #	NM_015906.3
UniProt Accession #	Q9UPN9; O95855; Q5TG72; Q5TG73; Q5TG74; Q9C017; Q9UJ79
Molecular Weight	120,541 Da
NCBI Official Full Name	E3 ubiquitin-protein ligase TRIM33 isoform alpha
NCBI Official Synonym Full Names	tripartite motif containing 33
NCBI Official Symbol	TRIM33
NCBI Official Synonym Symbols	ECTO; PTC7; RFG7; TF1G; TIF1G; TIFGAMMA; TIF1GAMMA
NCBI Protein Information	E3 ubiquitin-protein ligase TRIM33; RET-fused gene 7 protein; TIF1-gamma; ectodermin homolog; protein Rfg7; transcriptional intermediary factor 1 gamma; tripartite motif-containing 33
UniProt Protein Name	E3 ubiquitin-protein ligase TRIM33
UniProt Gene Name	TRIM33
UniProt Synonym Gene Names	KIAA1113; RFG7; TIF1G; Protein Rfg7; TIF1-gamma
UniProt Entry Name	TRI33_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/trim33-recombinant-protein-e-coli/59639>