



TRIM37 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56378

Specification

TRIM37 Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity
Isotype
Purity

affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

SIMILARITY

Post-translational modifications DISEASE

Important Note

WB, IHC-P, IHC-F, IF, ICC, E

094972

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 108 KDa Liquid

KLH conjugated synthetic peptide derived

from human TRIM37

601-700/964

laG

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Cytoplasm > perinuclear region.

Peroxisome. Found in vesicles of the peroxisome. Aggregates as aggresomes, a perinuclear region where certain misfolded or aggregated proteins are sequestered for

proteasomal degradation.

Belongs to the TRIM/RBCC family. Contains 1 B box-type zinc finger. Contains 1 MATH domain. Contains 1 RING-type zinc finger.

Auto-ubiquitinated.

Defects in TRIM37 are the cause of mulibrey nanism (MUL) [MIM:253250]; also known as muscle-liver-brain-eye nanism. MUL is an autosomal recessive disorder

that involves several tissues of

mesodermal origin, implying a defect in a highly pleiotropic gene. Characteristic features include severe growth failure of

prenatal onset and constrictive pericardium with consequent hepatomegaly. In addition, muscle

hypotonia, J-shaped sella turcica, yellowish dots in the ocular fundi, typical dysmorphic

features and hypoplasia of various endocrine glands causing hormonal

deficiency are common.

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



Background Descriptions

TRIM37 is a protein that localizes to peroxisomes and contains a tripartite motif (TRIM) and a tumor necrosis factor-receptor associated factor (TRAF) domain. The protein and gene forms of TRIM37 are highly conserved between human and mouse. TRIM37 is expressed at a low level in the liver, ovary, heart, lung, skeletal muscle, and kidney, while it is highly expressed in the testis and brain, where it may act as an E3 ubiquitin ligase. Mutations in the TRIM37 gene result in Mulibrey nanism, an autosomal recessive prenatal-onset growth disorder that causes characteristic dysmorphic craniofacial features, heart disease, cardiopathy, failure of sexual maturation, and hepatomegaly.

TRIM37 Polyclonal Antibody - Additional Information

Gene ID 4591

Other Names

E3 ubiquitin-protein ligase TRIM37, 2.3.2.27, Mulibrey nanism protein, RING-type E3 ubiquitin transferase TRIM37, Tripartite motif-containing protein 37, TRIM37 (HGNC:7523)

Target/Specificity Ubiquitous.

Dilution

WB~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

TRIM37 Polyclonal Antibody - Protein Information

Name TRIM37 {ECO:0000303|PubMed:28724525, ECO:0000312|HGNC:HGNC:7523}

Function

E3 ubiquitin-protein ligase required to prevent centriole reduplication (PubMed:15885686, PubMed:23769972). Probably acts by ubiquitinating positive regulators of centriole reduplication (PubMed:23769972). Mediates monoubiquitination of 'Lys-119' of histone H2A (H2AK119Ub), a specific tag for epigenetic transcriptional repression: associates with some Polycomb group (PcG) multiprotein PRC2-like complex and mediates repression of target genes (PubMed:25470042). Also acts as a positive regulator of peroxisome import by mediating monoubiquitination of PEX5 at 'Lys-472': monoubiquitination promotes PEX5 stabilitation by preventing its polyubiquitination and degradation by the proteasome (PubMed:28724525). Has anti-HIV activity (PubMed:24317724).



Cellular Location

Chromosome. Cytoplasm, perinuclear region. Peroxisome membrane; Peripheral membrane protein. Note=Found in vesicles of the peroxisome. Aggregates as aggresomes, a perinuclear region where certain misfolded or aggregated proteins are sequestered for proteasomal degradation.

Tissue Location

Ubiquitous (PubMed:10888877). Highly expressed in testis, while it is weakly expressed in other tissues (PubMed:16310976).

TRIM37 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRIM37 Polyclonal Antibody - Images