Product Name: **Midline-1 Rabbit Polyclonal Antibody**
Catalog #: **APRab13898**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
Molecular Weight	75kDa

Antigen Information

Gene Name	MID1
Alternative Names	MID1; FXY; RNF59; TRIM18; XPRF; Midline-1; Midin; Midline 1 RING finger protein; Putative transcription factor XPRF; RING finger protein 59; Tripartite motif-containing protein 18
Gene ID	4281.0
SwissProt ID	O15344
Immunogen	The antiserum was produced against synthesized peptide derived from human TRI18. AA range:71-120

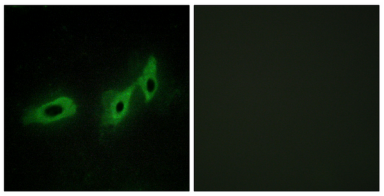
Background

midline 1(MID1) Homo sapiens The protein encoded by this gene is a member of the tripartite motif (TRIM) family, also known as the 'RING-B box-coiled coil' (RBCC) subgroup of RING finger proteins. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein forms homodimers which associate with microtubules in the cytoplasm. The protein is likely involved in the formation of multiprotein structures acting as anchor points to microtubules. Mutations in this gene have been associated with the X-linked form of Opitz syndrome, which is characterized by midline abnormalities such as cleft lip, laryngeal cleft, heart defects, hypospadias, and agenesis of the corpus callosum. This gene was also the first example of a gene subject to X inactivation in human while escaping it in mouse. Multiple different transcript variants are generated by alternate splicing; however, tdisease:Defects in MID1 are the cause of Opitz syndrome type I (OS-I) [MIM:300000]. OS-I is an X-linked recessive disorder characterized by hypertelorism, genital-urinary defects such as hypospadias in males and splayed labia in females, lip-palate-laryngotracheal clefts, imperforate anus, developmental delay and congenital heart defects. OS-I mutations produce proteins with a decreased affinity for microtubules.,function:May have E3 ubiquitin ligase activity which targets the catalytic subunit of protein phosphatase 2 for degradation.,induction:A retroviral element acts as an alternative tissue-specific promoter for this gene. The LTR of an HERV-E element enhances the expression in placenta and embryonic kidney.,PTM:Phosphorylated on serine and threonine residues.,similarity:Belongs to the TRIM/RBCC family.,similarity:Contains 1 B30.2/SPRY domain.,similarity:Contains 1 COS domain.,similarity:Contains 1 fibronectin type-III domain.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 2 B box-type zinc fingers.,subcellular location:Microtubule-associated. It is associated with microtubules throughout the cell cycle, co-localizing with cytoplasmic fibers in interphase and with the mitotic spindle and midbodies during mitosis and cytokinesis.,subunit:Homodimer or heterodimer with MID2. Interacts with IGBP1.,tissue specificity:In the fetus, highest expression found in kidney, followed by brain and lung. Expressed at low levels in fetal liver. In the adult, most abundant in heart, placenta and brain.,

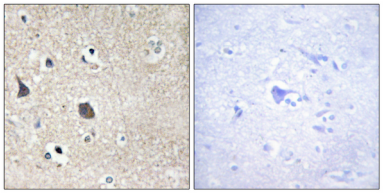
Research Area

Ubiquitin mediated proteolysis;

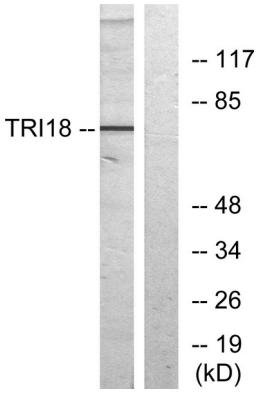
Image Data



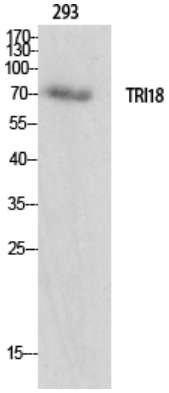
Immunofluorescence analysis of HeLa cells, using TRI18 Antibody. The picture on the right is blocked with the synthesized peptide.



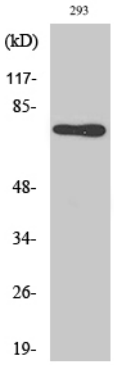
Immunohistochemistry analysis of paraffin-embedded human brain tissue, using TRI18 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using TRI18 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Midline-1 Polyclonal Antibody



Western Blot analysis of 293 cells using Midline-1 Polyclonal Antibody