

## **Midline-1 Polyclonal Antibody**

Catalog No: YT2760

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Midline-1

**Fields:** >>Ubiquitin mediated proteolysis

O15344

O70583

Gene Name: MID1

Protein Name: Midline-1

Human Gene Id: 4281

**Human Swiss Prot** 

Idiliali Swiss Fio

No:

Mouse Gene Id: 17318

**Mouse Swiss Prot** 

No:

Rat Gene ld: 54252

Rat Swiss Prot No: P82458

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

TRI18. AA range:71-120

**Specificity:** Midline-1 Polyclonal Antibody detects endogenous levels of Midline-1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 75kD

**Cell Pathway:** Ubiquitin mediated proteolysis;

**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, t

**Function:** disease: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., simil

Subcellular Location : Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, spindle. Microtubule-associated. It is associated with microtubules throughout the cell cycle, co-localizing with cytoplasmic fibers in interphase and with the mitotic

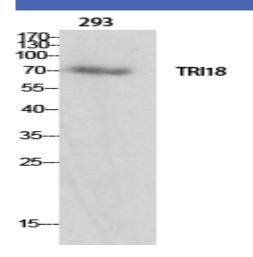
spindle and midbodies during mitosis and cytokinesis.

**Expression :** In the fetus, highest expression found in kidney, followed by brain and lung.

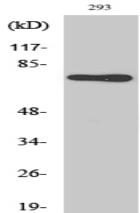
Expressed at low levels in fetal liver. In the adult, most abundant in heart,

placenta and brain.

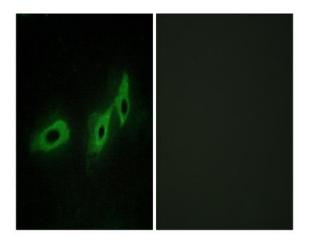
## **Products Images**



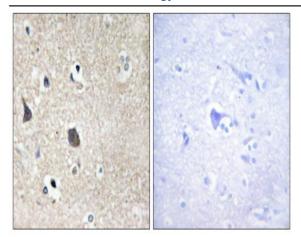
Western Blot analysis of various cells using Midline-1 Polyclonal Antibody



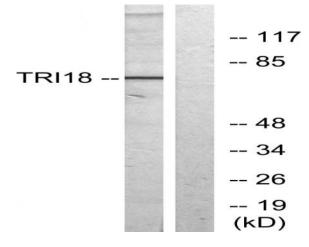
Western Blot analysis of 293 cells using Midline-1 Polyclonal Antibody



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.