

Specification

Application	WB
Primary Accession	O43541
Other Accession	NM_005585 , NP_005576
Reactivity	Human, Pig, Bovine, Dog
Predicted	Human, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53kDa kDa

Transforming growth factor-beta superfamily receptors signaling occurs through the Smad family of intracellular mediators. SMAD6 is an inhibitory Smad (i-Smad) that negatively regulates signaling downstream of type I transforming growth factor-beta (PubMed:10647776, PubMed:10708948, PubMed:10708949, PubMed:10708950).

href="http://www.uniprot.org/citations/16951688" target="_blank">16951688, PubMed:22275001, PubMed:30848080, PubMed:9436979, PubMed:9759503). Acts as a mediator of TGF-beta and BMP anti-inflammatory activities. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B- mediated expression of pro-inflammatory genes (PubMed:16951688). Blocks the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor- activated SMAD1-binding (PubMed:30848080, PubMed:9436979). Binds to regulatory elements in target promoter regions (PubMed:16491121).

Cellular Location

Nucleus.

Tissue Location

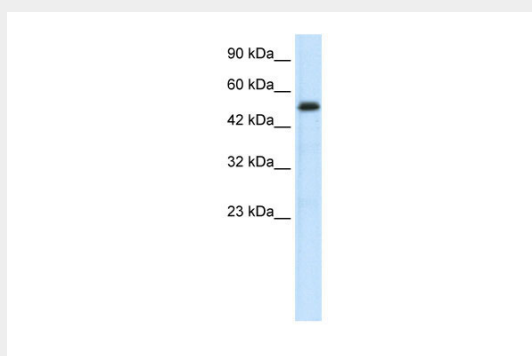
[Isoform B]: Expressed in the brain, heart, ovary, peripheral blood leukocytes, small intestine, spleen, thymus, bone marrow, fetal liver and lymph nodes.

SMAD6 antibody - N-terminal region - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

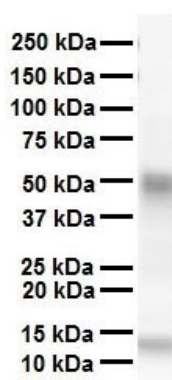
SMAD6 antibody - N-terminal region - Images



WB Suggested Anti-SMAD6 Antibody Titration: 0.2-1 µg/ml

Positive Control: Jurkat cell lysate

There is BioGPS gene expression data showing that SMAD6 is expressed in Jurkat



WB Suggested Anti-SMAD6 antibody Titration: 1 µg/ml
Sample Type: Human heart

SMAD6 antibody - N-terminal region - Background

Acts as a mediator of TGF-beta and BMP antiflammatory activity. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B-mediated expression of proinflammatory genes. May block the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor-activated SMAD1-binding. Binds to regulatory elements in target promoter regions.

SMAD6 antibody - N-terminal region - References

Riggins G.J.,et al.Nat. Genet. 13:347-349(1996).
Hata A.,et al.Genes Dev. 12:186-197(1998).
Afrakhte M.,et al.Biochem. Biophys. Res. Commun. 249:505-511(1998).
Hagiwara K.,et al.Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
Konrad L.,et al.Submitted (NOV-2007) to the EMBL/GenBank/DDBJ databases.