

SMAD2 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21228a

Specification

SMAD2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q15796
Reactivity	Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Calculated MW	52306

SMAD2 Antibody (N-term) - Additional Information

Gene ID 4087

Target/Specificity

This SMAD2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 106-140 amino acids from the N-terminal region of human SMAD2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

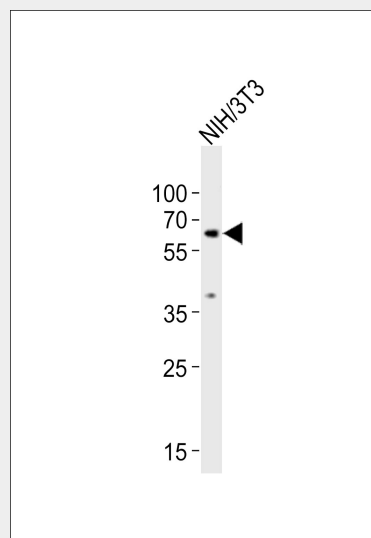
Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SMAD2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SMAD2 Antibody (N-term) - Protein Information



Anti-SMAD2 Antibody (N-term) at 1:1000 dilution + NIH/3T3 whole cell lysates
Lysates/proteins at 20 µg per lane.
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 52 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Name SMAD2

Synonyms MADH2, MADR2

Function

Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. May act as a tumor suppressor in colorectal carcinoma. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

Cellular Location

Cytoplasm. Nucleus. Note=Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:9865696, PubMed:21145499). On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in the cytoplasm at the blastocyst and epiblast stages (By similarity)
{ECO:0000250|UniProtKB:Q62432,
ECO:0000269|PubMed:16751101,
ECO:0000269|PubMed:19289081,
ECO:0000269|PubMed:21145499,
ECO:0000269|PubMed:9865696}

Tissue Location

Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

SMAD2 Antibody (N-term) - 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](#)