A18078

Leader in Biomolecular Solutions for Life Science

[KO Validated] Smad4 Rabbit pAb

Catalog No.: A18078

KO Validated 1 Publications

Basic Information

Observed MW 60kDa

Calculated MW 60kDa

Category Polyclonal Antibody

Applications WB, ELISA

Cross-Reactivity Human, Mouse

Background

This gene encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to transforming growth factor (TGF)-beta signaling. The product of this gene forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The protein acts as a tumor suppressor and inhibits epithelial cell proliferation. It may also have an inhibitory effect on tumors by reducing angiogenesis and increasing blood vessel hyperpermeability. The encoded protein is a crucial component of the bone morphogenetic protein signaling pathway. The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in this gene have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

Recommended Dilutions

Immunogen Information

WB

1:500 - 1:2000

Gene ID 4089

Swiss Prot 013485

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 160-450 of human Smad4 (NP 005350.1).

Synonyms JIP; DPC4; MADH4; MYHRS; d4

Contact

Product Information

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www.abclonal.com

Isotype lgG

Purification Affinity purification

Storage

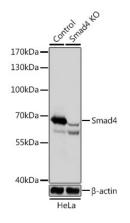
Source

Rabbit

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.



Validation Data



Western blot analysis of lysates from wild type (WT) and Smad4 knockout (KO) HeLa cells, using [KO Validated] Smad4 Rabbit pAb (A18078) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.