For Research Use Only

SMAD2 Polyclonal antibody

Catalog Number: 23499-1-AP



Purification Method:

WB 1:500-1:2000

Antigen affinity purification

Recommended Dilutions:

Basic Information

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GenBank Accession Number:

GeneID (NCBI):

150ul , Concentration: 547 µg/ml by 4087

BC014840

Bradford method using BSA as the standard;

UNIPROT ID: Q15796

Source: Rabbit

Full Name: SMAD family member 2

Isotype: Calculated MW:

467 aa, 52 kDa Immunogen Catalog Number: Observed MW: AG19542 58 kDa

Applications

Tested Applications:

WB, ELISA

Positive Controls: WB: Jurkat cells,

Species Specificity:

human

Background Information

SMAD2, also named as MADH2 and MADR2, belongs to the dwarfin/SMAD family, contains 1 MH1 (MAD homology 1) domain and 1 MH2 (MAD homology 2) domain. SMAD2 is a receptor-regulated SMAD(R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta and activin type 1 receptor kinases. This protein may act as a tumor suppressor in colorectal carcinoma. It is phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, It is phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases, and then able to interact with SMURF2, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, it is phosphorylated on Ser-240 by CaMK2. It is phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin. In response to TGF-beta, it is ubiquitinated by NEDD4L, which promotes its degradation. In response to TGF-beta signaling, it is acetylated on Lys-19 by coactivators, which increases transcriptional activity.

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data