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| <b>Product name:</b>     | Smad3 (phospho Thr179) Rabbit Polyclonal Antibody                                                                                           |
| <b>Cat number:</b>       | ABN05449                                                                                                                                    |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                |
| <b>Size:</b>             | 100µL                                                                                                                                       |
| <b>Clone:</b>            | Polyclonal                                                                                                                                  |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                      |
| <b>Host:</b>             | Rabbit                                                                                                                                      |
| <b>Isotype:</b>          | IgG                                                                                                                                         |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human Smad3 around the phosphorylation site of Thr179. AA range:145-194 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                             |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000                                                                      |
| <b>Molecular Weight:</b> | 50kDa                                                                                                                                       |
| <b>Purification:</b>     | Affinity purification                                                                                                                       |
| <b>Form:</b>             | Liquid                                                                                                                                      |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                          |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                                                |

**Background:**

The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by RefSeq, Apr 2009],disease:Defects in SMAD3 may be a cause of colorectal cancer (CRC) [MIM:114500].,domain:The MH2 domain is sufficient to carry protein nuclear export.,function:Transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is a receptor-regulated SMAD (R-SMAD).,PTM:Phosphorylated on serine by TGF-beta and activin type 1 receptor kinases.,similarity:Belongs to the dwarfin/SMAD family.,similarity:Contains 1 MH1 (MAD homology 1) domain.,similarity:Contains 1 MH2 (MAD homology 2) domain.,subcellular location:In the cytoplasm in the absence of ligand. Migration to the nucleus when complexed with Smad4.,subunit:Interacts with HGS. Interacts with NEDD4L in response to TGF-beta. Interacts with TTRAP (By similarity). Interacts with SARA (SMAD anchor for receptor activation); form trimers with another SMAD3 and the co-SMAD SMAD4. Interacts with JUN/FOS, vitamin D receptor, homeobox protein TGIF and TGIF2, PEBP2-alpha C subunit, CREB-binding protein (CBP), p300, SKI, SNON, ATF2, SMURF2, AIP1, DACH1 and TGFB1I1. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3. Found in a complex with SMAD2 and TRIM33 upon addition of TGF-beta. Interacts with SMAD2 and TRIM33. Found in a complex with SMAD3, Ran and XPO4. Interacts with XPO4. Interacts with LBXCOR1 and CORL2.,