

(KO Validated) SMAD2 Polyclonal Antibody

catalog number: E-AB-62120

Note: Centrifuge before opening to ensure complete recovery of vial contents.

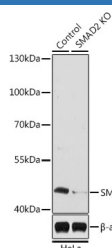
Description

| | |
|---------------------|--|
| Reactivity | Human;Mouse;Rat |
| Immunogen | A synthetic peptide of human SMAD2 (NP_001003652.1). |
| Host | Rabbit |
| Isotype | IgG |
| Purification | Affinity purification |
| Buffer | Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol. |

Applications Recommended Dilution

| | |
|------------|--------------|
| WB | 1:500-1:2000 |
| IHC | 1:50-1:200 |
| IF | 1:50-1:200 |

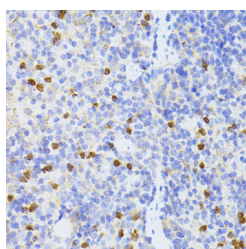
Data



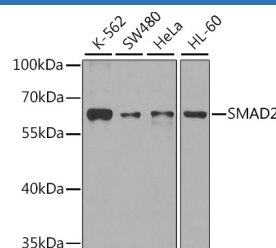
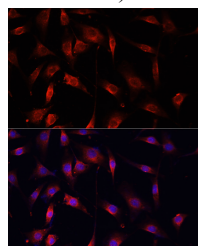
Western blot analysis of extracts from normal (control) and SMAD2 knockout (KO) HeLa cells using SMAD2 Polyclonal Antibody at dilution of 1:1000.

Observed-MW:60 kDa

Calculated-MW:48 kDa/52 kDa



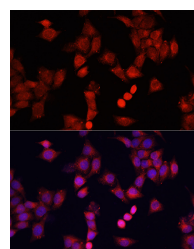
Immunohistochemistry of paraffin-embedded Mouse spleen using SMAD2 Polyclonal Antibody at dilution of 1:100 (40x lens).



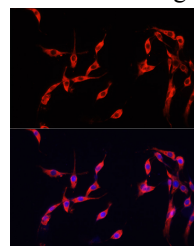
Western blot analysis of extracts of various cell lines using SMAD2 Polyclonal Antibody at dilution of 1:1000.

Observed-MW:60 kDa

Calculated-MW:48 kDa/52 kDa



Immunofluorescence analysis of HeLa cells using SMAD2 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



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Immunofluorescence analysis of NIH/3T3 cells using SMAD2 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

Immunofluorescence analysis of PC-12 cells using SMAD2 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

Preparation & Storage

Storage

Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

Shipping

The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

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 mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type I receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

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