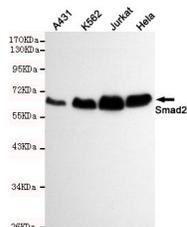




Smad2

Mouse monoclonal Antibody

#53310

Catalog Number: 53310**Amount:** 100µg/100µl**Swiss-Prot No. :** Q15796**Gene name:** smad2**Gene id:** 4087**Clone Number:** 6H5-E3-C11**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol**Storage/Stability:** Store at -20°C/1 year**Immunogen:** Purified recombinant human Smad2 protein fragments expressed in E.coli**Purification:** affinity-chromatography**Specificity/Sensitivity:** This antibody detects endogenous levels of Smad2 and does not cross-react with related proteins**Reactivity:** Human**Applications:** Predicted MW: 60kd WB: 1:500 ICC:1:100

Western blot detection of Smad2 in HeLa, A431, Jurkat and K562 cell lysates using Smad2 mouse mAb (1:500 diluted). Predicted band size: 60KDa. Observed band size: 60KDa.

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 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene