

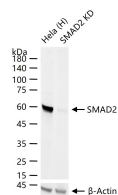
bsm-52223R**[Primary Antibody]****Bioss**
ANTIBODIES

www.bioss.com.cn

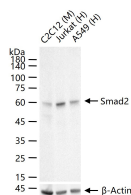
sales@bioss.com.cn

techsupport@bioss.com.cn

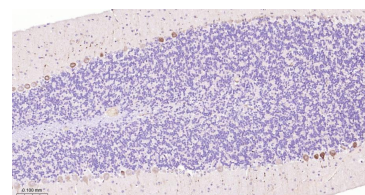
400-901-9800

Smad2 Recombinant Rabbit mAb**— DATASHEET —****Host:** Rabbit**Isotype:** IgG**Clonality:** Recombinant**CloneNo.:** 9A3**GeneID:** 4087**SWISS:** Q15796**Target:** Smad2**Immunogen:** A synthesized peptide derived from human SMAD2: 230-270.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated 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 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. [provided by RefSeq, May 2012]**Applications:** **WB** (1:500-2000)
IHC-P (1:50-200)
IHC-F (1:50-200)
IF (1:50-200)
Flow-Cyt (1ug/Test)
ICC/IF (1:50-200)**Reactivity:** Human, Mouse, Rat**Predicted MW.:** 52 kDa**Observed MW.:** 60 kDa**Subcellular Location:** Cytoplasm ,Nucleus**— VALIDATION IMAGES —**

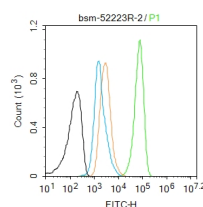
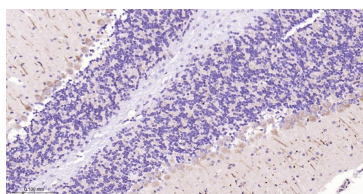
25 ug total protein per lane of various lysates (see on figure) probed with SMAD2 monoclonal antibody, unconjugated (bsm-52223R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



25 ug total protein per lane of various lysates (see on figure) probed with Smad2 monoclonal antibody, unconjugated (bsm-52223R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Rat Cerebellum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad2 Monoclonal Antibody, Unconjugated(bsm-52223R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Paraformaldehyde-fixed, paraffin embedded Mouse Cerebellum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad2 Monoclonal Antibody, Unconjugated(bsm-52223R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

Blank control: A431. Primary Antibody (green line): Rabbit Anti-Smad2 antibody (bsm-52223R) Dilution: 1µg /10⁶ cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=4.694]** Qi SS et al. Protective Effects of Chromium Picolinate Against Diabetic-Induced Renal Dysfunction and Renal Fibrosis in Streptozotocin-Induced Diabetic Rats. Biomolecules. 2020 Mar 4;10(3). IHC ;rat. 32143429