bs-8853R **[Primary Antibody]**

phospho-Smad2/Smad3 (Thr8) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 4087 **SWISS:** Q15796

Target: phospho-Smad2/Smad3 (Thr8)

Immunogen: KLH conjugated synthesised phosphopeptide derived from human Smad2/Smad3 around the phosphorylation site of Thr8: PF(p-T)PP.

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]

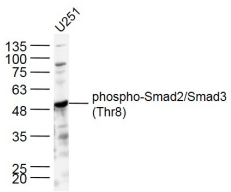
Applications: **WB** (1:500-2000)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse (predicted: Rat, Pig, Cow, Chicken, Dog, Horse)

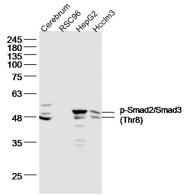
Predicted MW.: 52 kDa

Subcellular Location: Cytoplasm ,Nucleus

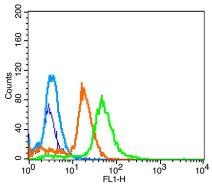
VALIDATION IMAGES



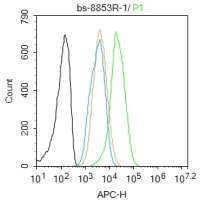
Sample: U251 cell(human) Lysate at 30 ug Primary: Anti- p-Smad2/Smad3 (Thr8) (bs-8853R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52kD Observed band size: 52 kD



Sample: cerebrum(mouse) Lysate at 40 ug RSC96 cell(rat) Lysate at 30 ug hepG2 cell(human) Lysate at 30 ug Hcclm3 cell(human) Lysate at 30 ug Primary: Anti- p-Smad2/Smad3 (Thr8) (bs-8853R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52kD Observed band size: 48,52 kD



blank: A549 cells (blue line) isotype control: rabbit IgG (orange line) second antibody: goat anti-rabbit IgG (white blue line) primary antibody: rabbit Anti-phospho-Smad2/Smad3 (Thr8) (green line); contration: 3μg /10^6 cells



Blank control: Hela. Primary Antibody (green line): Rabbit Anti-phospho-Smad2/Smad3 (Thr8) antibody (bs-8853R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 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 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=6.3]** Hangzhuo Li. et al. Resistance exercise upregulates Irisin expression and suppresses myocardial fibrosis following myocardial infarction via activating AMPK-Sirt1 and inactivating TGFβ1-Smad2/3. ACTA PHYSIOL. 2024 May;:e14163 WB ;Mouse. 38752665
- **[IF=5.682]** Xiaolan You. et al. Fibroblastic galectin-1-fostered invasion and metastasis are mediated by TGF-β1-induced epithelial-mesenchymal transition in gastric cancer. Aging-Us. 2021 Jul 31; 13(14): 18464–18481 WB,IHC ;Mouse. 34260413
- **[IF=5.6]** Yake Wang. et al. The Upregulation of Leucine-Rich Repeat Containing 1 Expression Activates Hepatic Stellate Cells and Promotes Liver Fibrosis by Stabilizing Phosphorylated Smad2/3. INT J MOL SCI. 2024 Jan;25(5):2735 IP,WB ;Mouse,Human. 38473980
- **[IF=5.097]** Yan L et al. Exosomes produced from 3D cultures of umbilical cord mesenchymal stem cells in a hollow-fiber bioreactor show improved osteochondral regeneration activity. Cell Biology and Toxicology. WB ;Human. doi:10.1007/s10565-019-09504-5
- **[IF=4.96]** Liang H et al. RGFP966, a Histone deacetylase 3 inhibitor, promotes glioma stem cell differentiation by blocking TGF-β signaling via SMAD7. Biochem Pharmacol . 2020 Oct;180:114118. WB ;Human. 32585142