bs-3418R **[Primary Antibody]**

phospho-Smad1/5 (Ser463 + Ser465) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 4086 **SWISS:** Q15797

Target: Smad1/5 (Ser463 + Ser465)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human Smad1/5 around the phosphorylation site of Ser463/465: IS(p-S)V(p-S).

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 signals of the bone morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq].

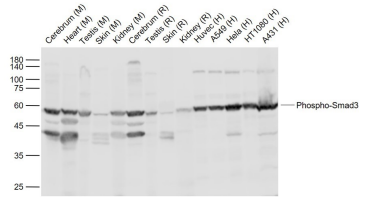
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg/Test)

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

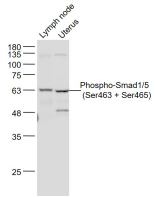
Predicted MW.: 52 kDa

Subcellular Location: Nucleus

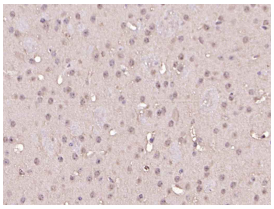
VALIDATION IMAGES



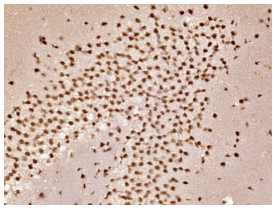
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Heart (Mouse) Lysate at 40 ug Lane 3: Testis (Mouse) Lysate at 40 ug Lane 4: Skin (Mouse) Lysate at 40 ug Lane 5: Kidney (Mouse) Lysate at 40 ug Lane 6: Cerebrum (Rat) Lysate at 40 ug Lane 7: Testis (Rat) Lysate at 40 ug Lane 8: Skin (Rat) Lysate at 40 ug Lane 9: Kidney (Rat) Lysate at 40 ug Lane 10: Huvec (Human) Cell Lysate at 30 ug Lane 11: A549 (Human) Cell Lysate at 30 ug Lane 12: Hela (Human) Cell Lysate at 30 ug Lane 13: HT1080 (Human) Cell Lysate at 30 ug Lane 14: A431 (Human) Cell Lysate at 30 ug Primary: Anti-Phospho-Smad3 (Ser463 + Ser465) (bs-3418R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52 kD Observed band size: 54 kD



Cerebrum (Mouse) Lysate at 40 ug Stomach (Mouse) Lysate at 40 ug Primary: Anti-Phospho-Smad1/5 (Ser463 + Ser465) (bs-3418R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52 kD Observed band size: 62 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Smad1-5 (Ser463+ Ser465)) Polyclonal Antibody, Unconjugated (bs-3418R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Smad1 5 (Ser463 + Ser465)) Polyclonal Antibody, Unconjugated (bs-3418R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

SELECTED CITATIONS

- **[IF=4.2]** Zhang Quan-Bing. et al. Role of hypoxia-mediated pyroptosis in the development of extending knee joint contracture in rats. EUR J MED RES. 2024 Dec;29(1):1-12 WB ;Rat. 38802976
- **[IF=3.8]** Xing Fuao. et al. BMP2 expression in oral squamous cell carcinoma and its effects on SCC9 cell biological behavior. SCI REP-UK. 2025 Apr;15(1):1-12 WB ;Human. 40185978
- **[IF=3.266]** Guo LP et al. Smad signaling coincides with epithelial-mesenchymal transition in a rat model of intrauterine adhesion. Am J Transl Res. 2019 Aug 15;11(8):4726-4737. eCollection 2019. IHC ;Rat. 31497194
- **[IF=2.7]** Junfeng He. et al. Effect of the TGF-β/BMP Signaling Pathway on the Proliferation of Yak Pulmonary Artery Smooth Muscle Cells under Hypoxic Conditions. ANIMALS. 2024 Jan;14(14):2072 WB ;Bovine. 39061534
- **[IF=2.9]** Zhen Liu. et al. Enhanced bacteriostasis and osseointegrative properties of SiRNA-modified polyetheretherketone surface for implant applications. PLOS ONE. 2024 Dec;19(12):e0314091 WB ;Rat. 39636795