
Phospho-Smad3 (Ser423 + Ser425) Rabbit pAb

Catalog Number: bs-3425R

Target Protein: Phospho-Smad3 (Ser423 + Ser425)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

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: 47 kDa

Entrez Gene: 4088

Swiss Prot: P84022

Source: KLH conjugated Synthesised phosphopeptide derived from human Smad3 around the phosphorylation site of Ser423/425: CS(p-S)V(p-S).

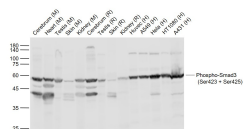
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

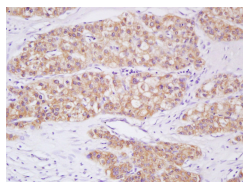
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development. The Smad family is divided into three subclasses: receptor regulated Smads, activin/TGF beta receptor regulated (Smad2 and 3) or BMP receptor regulated (Smad 1, 5, and 8); the common partner, (Smad4) that functions via its interaction to the various Smads; and the inhibitory Smads, (Smad6 and 7). Activated Smad3 oligomerizes with Smad4 upon TGF beta stimulation and translocates as a complex into the nucleus, allowing its binding to DNA and transcription factors. Phosphorylation of the two TGF beta dependent serines 423 and 425 in the C terminus of Smad3 is critical for Smad3 transcriptional activity and TGF beta signaling.

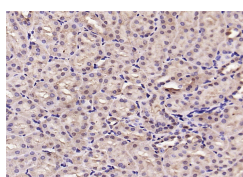
VALIDATION IMAGES



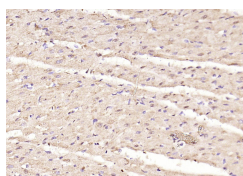
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Heart (Mouse) Lysate at 40 ug Lane 3: Testis (Mouse) Lysate at 40 ug Lane 4: Skin (Mouse) Lysate at 40 ug Lane 5: Kidney (Mouse) Lysate at 40 ug Lane 6: Cerebrum (Rat) Lysate at 40 ug Lane 7: Testis (Rat) Lysate at 40 ug Lane 8: Skin (Rat) Lysate 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 (Ser423 + Ser425) (bs-3425R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52 kD Observed band size: 54 kD



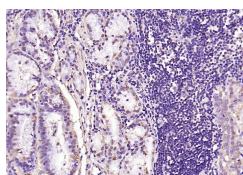
Tissue/cell: human liver carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Phospho-Smad3(Ser423/425) Polyclonal Antibody, Unconjugated(bs-3425R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



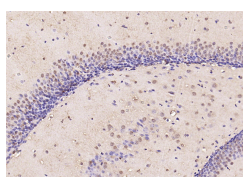
Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Smad3 (Ser423 + Ser425)) Polyclonal Antibody, Unconjugated (bs-3425R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat heart); 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-Smad3 (Ser423 + Ser425)) Polyclonal Antibody, Unconjugated (bs-3425R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); 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-Smad3 (Ser423 + Ser425)) Polyclonal Antibody, Unconjugated (bs-3425R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and 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-Smad3 (Ser423 + Ser425)) Polyclonal Antibody, Unconjugated (bs-3425R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

PRODUCT SPECIFIC PUBLICATIONS

[IF=17.694] Kim, Duk Ki. et al. PD-L1-directed PlGF/VEGF blockade synergizes with chemotherapy by targeting CD141+ cancer-associated fibroblasts in pancreatic cancer. NAT COMMUN. 2022 Oct;13(1):1-19 FCM ; Mouse . 36272973

[IF=14] Ke Xu. et al. Polystyrene microplastics and di-2-ethylhexyl phthalate co-exposure: Implications for female reproductive health. Environmental Science and Ecotechnology. 2024 Nov;22:100471 IHC ; Rat . 39220680

[IF=9.7] Xing Li. et al. Inducible nitric oxide synthase (iNOS)-activated Cxcr2 signaling in myeloid cells promotes TGFβ-dependent squamous cell carcinoma lung metastasis. CANCER LETT. 2023 Aug;570:216330 IHC ; Human . 37524225

[IF=8.5] Genghua Chen. et al. Bulk and single-cell alternative splicing analyses reveal roles of TRA2B in myogenic differentiation. CELL PROLIFERAT. 2023 Sep;;e13545 WB ; Chicken . 37705195

[IF=8.3] Cai Bolin. et al. MYH1G-AS is a chromatin-associated lncRNA that regulates skeletal muscle development in chicken. CELL MOL BIOL LETT. 2024 Dec;29(1):1-25 WB ; Chicken . 38177995