bs-4056R **[Primary Antibody]**

SMURF2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 64750 **SWISS:** Q52LL1

Target: SMURF2

Immunogen: KLH conjugated synthetic peptide derived from human SMURF2: 601-700/748.

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: SMURF2, a 748-amino acid ubiquitin E3 ligase that is 83% identical to SMURF1, codes for a C2-WW-HECT domain ubiquitin ligase that associates constitutively with SMAD7. Binding to SMAD7 induces export of SMURF2 and recruitment to the activated transforming growth factor-beta receptor (TGFBR), where it causes receptor and SMAD7 degradation. A strong interaction of second and third SMURF2 WW domains has been identified with SMAD1, SMAD2, and SMAD3, but not SMAD4. Western blot analysis showed that SMURF2 selectively downregulates the transcription of SMAD2 and SMAD1, but not SMAD3. The nuclear SMURF2/phosphorylated SMAD2 interaction is requires TGFB1.

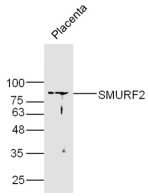
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (3ug/test)

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

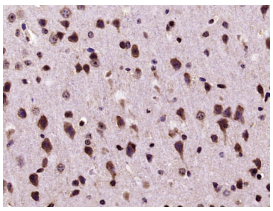
Predicted MW.: 82 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

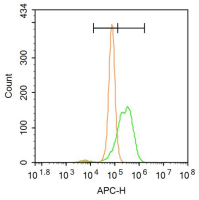
VALIDATION IMAGES



Sample: Placenta (Mouse) Lysate at 40 ug Primary: Anti-SMURF2 (bs-4056R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 82 kD Observed band size: 82 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by microwave in sodium citratebuffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3%BSA) at RTfor 30min; Antibody incubation with (SMURF2) Polyclonal/MonoclonalAntibody, Unconjugated (bs-4056R) at 1:400 overnight at 4°C,followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.



Blank control:A431. Primary Antibody (green line): Rabbit Anti-SMURF2 antibody (bs-4056R) Dilution: 3µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 3µg /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=9.2]** Han Mingwei. et al. SMURF2 facilitates ubiquitin-mediated degradation of ID2 to attenuate lung cancer cell proliferation. INT J BIOL SCI. 2023 Jun;19(11):3324-3340 IHC ;Mouse. 10.7150/ijbs.80979
- **[IF=2.48]** Huang et al. The proteasome inhibitor, MG132, attenuates diabetic nephropathy by inhibiting SnoN

degradation in vivo and in vitro. (2014) Biomed.Res.Int. 2014:684765 IHC ;Rat. 25003128