

Product datasheet for **AP11954PU-N**

SMURF 2 (SMURF2) (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA 1:1,000. Western blot 1:100 - 1:500. Immunohistochemistry 1:50 - 1:100.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of human SMURF2.
Specificity:	This antibody detects SMURF2 at N-term.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	SMAD specific E3 ubiquitin protein ligase 2
Database Link:	Entrez Gene 66313 Mouse Entrez Gene 64750 Human Q9HAU4



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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 TGFβ1.

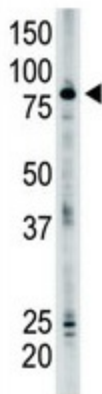
Synonyms: SMURF 2, SMURF-2

Note: Molecular weight: 86195 Da

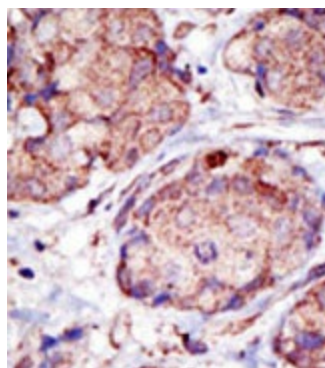
Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, TGF-beta signaling pathway, Type I diabetes mellitus, Ubiquitin mediated proteolysis, Viral myocarditis

Product images:



The anti-SMURF2 is used in Western blot to detect SMURF2 in mouse brain tissue lysate.



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.