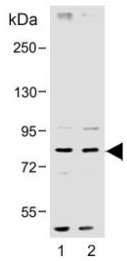
SMURF1 Antibody (F54751)

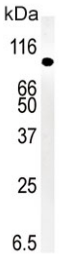
Catalog No.	Formulation	Size
F54751-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54751-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

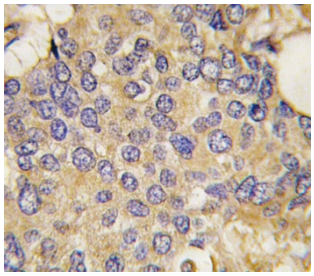
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9HCE7
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1:25 Western blot: 1:500-1:2000
Limitations	This SMURF1 antibody is available for research use only.



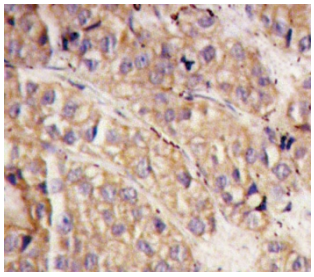
Western blot testing of human 1) MCF7 and 2) HeLa cell lysate with SMURF1 antibody. Expected molecular weight ~86 kDa.



Western blot testing of mouse kidney tissue lysate with SMURF1 antibody. Expected molecular weight ~86 kDa.



IHC testing of FFPE human testis tissue with SMURF1 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE human breast carcinoma tissue with SMURF1 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.

Description

Members of the transforming growth factor-beta (TGFB) family signal through type I and type II serine/threonine-kinase receptors, which in turn activate the SMAD signaling pathway. Bone morphogenetic protein (BMP) receptors target SMAD1, SMAD5, and SMAD8, whereas receptors for activin and TGFB (e.g., ACVR1 and TGFBR1, respectively) target SMAD2 and SMAD3. Phosphorylation of these receptor-regulated SMADs induces their association with the common-partner SMAD, SMAD4. Smurf1, a HECT domain E3 ubiquitin ligase, regulates cell polarity and protrusive activity and is required to maintain the transformed morphology and motility of a tumor cell. Atypical protein kinase C-zeta (PKC2), an effector of the Cdc42/Rac1-PAR6 polarity complex, recruits Smurf1 to cellular protrusions, where it controlled the local level of RhoA. Smurf1 thus links the polarity complex to degradation of RhoA in lamellipodia and filopodia to prevent RhoA signaling during dynamic membrane movements.

Application Notes

The stated application concentrations are suggested starting points. Titration of the SMURF1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 66-96 from the human protein was used as the immunogen for the SMURF1 antibody.

Storage

Aliquot the SMURF1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.