

Phospho-SMAD3 Antibody (pS208) (F48449)

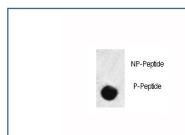
Catalog No.	Formulation	Size
F48449-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48449-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Chicken, Mouse, Pig, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P84022
Applications	Immunofluorescence: 1:10-1:100 Dot Blot: 1:500
Limitations	This phospho-SMAD3 antibody is available for research use only.



Confocal immunofluorescent analysis of phospho-SMAD3 antibody with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 Phalloidin (red).



Dot blot analysis of phospho-SMAD3 antibody. 50ng of phos-peptide or nonphos-peptide per dot were spotted.

Description

SMAD3, a receptor regulated SMAD (R-SMAD) is a transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is estimated to account for at least 80% of all TGF-beta-mediated response. Activated type I receptor phosphorylates receptor-activated SMADS (RSMADS) at their c-terminal two extreme serines in the SSXS motif. The phosphorylated R-SMAD translocate into nucleus, where they regulate transcription of target genes. SMAD3 signal transduction appears to be important in the rgulation of muscle-specific genes. Loss of SMAD3 is a feature of pediatric T-cell lymphoblastic leukemia, while upregulation of SMAD3 may be responsible for TGFB hyperresponsiveness observed in scleroderma.

Application Notes

Titration of the phospho-SMAD3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This phospho-SMAD3 antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS208 of human SMAD3.

Storage

Aliquot the phospho-SMAD3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.