

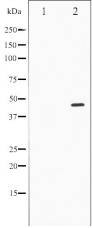
Phospho-Smad2/3 (Thr8) Ab

Cat.#: AF3367
Size: 100ul,200ul

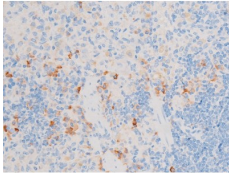
Concn.: 1mg/ml
Source: Rabbit

Mol.Wt.: 48/60kDa
Clonality: Polyclonal

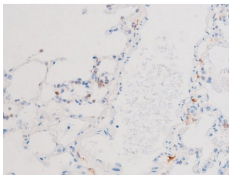
Application:	WB 1:500-1:2000 IHC 1:50-1:200
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-Smad2/3 (Thr8) Ab detects endogenous levels of Smad2/3 only when phosphorylated at Threonine 8.
Immunogen:	A synthesized peptide derived from human Smad2/3 around the phosphorylation site of Threonine 8.
Uniprot:	P84022/Q15796
Description:	Smad2 ubiquitously expressed transcription factor phosphorylated and activated by TGF-beta receptor-type kinases. Participates in a wide range of critical processes including morphogenesis, cell-fate determination, proliferation, differentiation and apoptosis.
Subcellular Location:	Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:15799969). Through the action of the phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Co-localizes with LEMD3 at the nucleus inner membrane (PubMed:15601644). MAPK-mediated phosphorylation appears to have no effect on nuclear import (PubMed:19218245). PDPK1 prevents its nuclear translocation in response to TGF-beta (PubMed:17327236).
Similarity:	The MH1 domain is required for DNA binding. Also binds zinc ions which are necessary for the DNA binding.The MH2 domain is required for both homomeric and heteromeric interactions and for transcriptional regulation. Sufficient for nuclear import.The linker region is required for the TGFbeta-mediated transcriptional activity and acts synergistically with the MH2 domain.Belongs to the dwarfin/SMAD family.
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



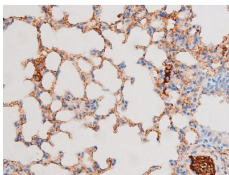
Western blot analysis of Smad2/3 phosphorylation expression in RAW264.7 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



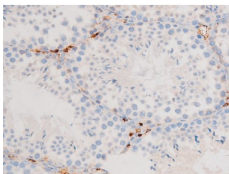
AF3367 at 1/200 staining Rat spleen tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3367 at 1/200 staining Rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3367 at 1/200 staining Mouse lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3367 at 1/200 staining Mouse testis tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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