

Smad23 (Phospho Thr8) Rabbit mAb (AR1893)

Key Features

Host Species:	Rabbit
Reactivity:	Human, Mouse, Rat
Applications:	WB, IF, IP, ELISA
Isotype:	IgG, Kappa
MW:	48kDa (Calculated) 62kDa (Observed)

Recommended Dilution Ratios

WB:	1:2000-10000
IF:	1:200-1000
ELISA:	1:5000-20000
IP:	1:50-200

Storage

-15°C to -25°C/1 year (Do not lower than -25°C)

Basic Information

Clonality	Monoclonal
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Immunogen Information

Specificity	Phospho-Smad2/3 (T8) Antibody detects endogenous levels of Smad2/3 protein only when phosphorylated at T8. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites): PFTPP
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Target Information

Gene name	SMAD2/SMAD3
Protein Name	Mothers against decapentaplegic homolog 2/3

Organism	Gene ID	UniProt ID
Human	4087; 4088	Q15796; P84022
Mouse	17126; 17127	
Rat	29357; 25631	O70436; P84025

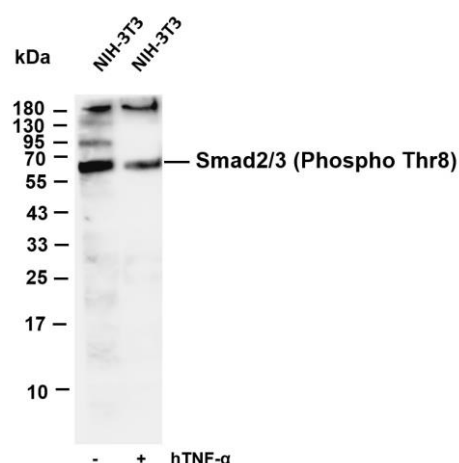
Cellular Localization

Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:9865696, PubMed:21145499). On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in the cytoplasm at the blastocyst and epiblast stages (By similarity).

Tissue specificity

Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Smad2/3 (Phospho Thr8) antibody. The HRP conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody.

Lane 1: NIH-3T3

Lane 2: NIH-3T3 treated with hTNF-α (20 ng/mL) for 30 minutes

Predicted band size: 48kDa

Observed band size: 62kDa

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