

## Smad3 (Phospho Ser423/425) Rabbit pAb(AR20032)

### Key Features

Host Species:	Rabbit
Reactivity:	Human, Mouse, Rat
Applications:	WB, ELISA, IHC
Isotype:	IgG
MW:	50kD (Observed)

### Recommended Dilution Ratios

WB:	1:500-2000
IHC:	1:50-300
ELISA:	1:2000-20000

### Storage

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

### Basic Information

Clonality	Polyclonal
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### Immunogen Information

Specificity	This antibody detects endogenous levels of Smad3 only when phosphorylated at Ser423 or ser425, and dually phosphorylated at two sites. 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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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):CSsVS
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### Target Information

Gene name	SMAD3 MADH3
Protein Name	Smad3 (Ser423/425)

Organism	Gene ID	UniProt ID
Human	4088	P84022

Mouse	17127	Q8BUN5
Rat	25631	P84025

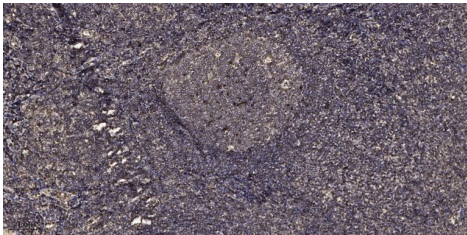
#### Cellular Localization

Cytoplasm . Nucleus . Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:15799969, PubMed:21145499). 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). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in the cytoplasm of the inner cell mass at the blastocyst stage (By similarity).

#### Tissue specificity

Brain,Colon carcinoma,Esophagus tumor,Pancreas,Placenta,Spleen,Umbilical cord blood

### Validation Data



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

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