# Smad3 (Phospho Ser423/Ser425) Rabbit mAb (AR1885)

## Key Features

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|---|---|
| Host Species: | Rabbit |
| Reactivity: | Human,Mouse,Rat |
| Applications: | WB,IHC,IF,ELISA |
| Isotype: | IgG,Kappa |
| MW: | 48kDa (Calculated)<br>52kDa (Observed) |

## Recommended Dilution Ratios

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| IHC: | 1:200-1000 |
| WB: | 1:2000-10000 |
| IF: | 1:200-1000 |
| ELISA: | 1:5000-20000 |

## Storage

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

## Basic Information

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|---|---|
| Clonality | Monoclonal |

## Immunogen Information

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|---|---|
| Specificity | Phospho-Smad3 (S423/S425) Antibody detects endogenous levels of Smad3 protein only when phosphorylated at S423/425.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may be prolonged with the development of protein sequencing technology).When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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 |

## Target Information

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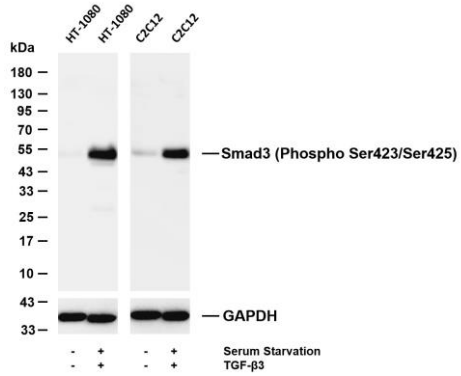
|---|---|
| Gene name | SMAD3 MADH3 |

| | |
|---|---|
| Protein Name | Mothers against decapentaplegic homolog 3 |

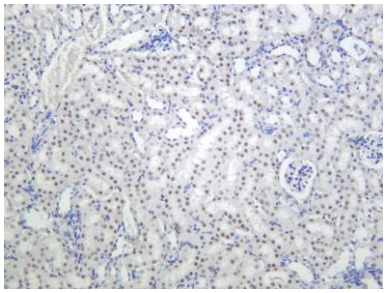
| Organism | Gene ID | UniProt ID |
|---|---|---|
| Human | 4088 | P84022 |
| Mouse | 17127 | Q8BUN5 |
| Rat | 25631 | P84025 |

| | |
|---|---|
| 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 |

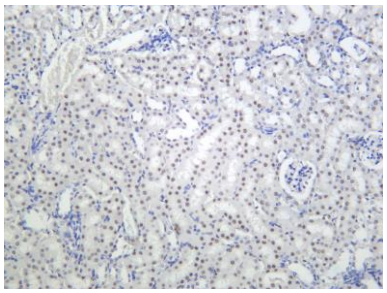
## Validation Data




Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Smad3 (Phospho Ser423/ Ser425) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody.
Lane 1: HT-1080
Lane 2: HT-1080 serum was starved overnight and treated with TGF-β3(10ng/ml) for 30 minutes
Lane 3: C2C12
Lane 4: C2C12 serum was starved overnight and treated with TGFβ 3(10ng/ml) for 30 minutes
Predicted band size: 48kDa
Observed band size: 52kDa



Rat kidney was stained with anti-Smad3 (Phospho Ser423/Ser425) Rabbit antibody



Mouse kidney was stained with anti-Smad3 (Phospho Ser423/ Ser425) Rabbit antibody.

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