

**SMAD4(R361H)****SMAD4(R361H)****Cat. #:** 26422**Gene Symbol:** SMAD4, DPC4, JIP, MADH4, MYHRS**Description:** Anti-SMAD4(R361H) Mouse Monoclonal Antibody

**Background:** SMAD4 family member 4, also known as SMAD4, is a protein that in human is encoded by the SMAD4 gene. It is often found mutated in many cancers. It acts as a tumor suppressor that functions in the regulation of the TGF- $\beta$  signal transduction pathway, which negatively regulates growth of epithelial cells and the extracellular matrix (ECM). SMAD4 alterations have been found in multiple colorectal cancers and pancreatic carcinoma. It is found inactivated in at least 50% of pancreatic cancers. It is also found mutated in the autosomal dominant disease juvenile polyposis syndrome (JPS).

**Immunogen:** A synthetic peptide from the internal region of SMAD4 which includes the mutation of R361H, human origin.

**Applications:** ELISA, WB, IHC**Recommended Dilutions:**

ELISA: 1:1000–1:2000

WB: 1:500–1:1000

IHC: 1:50–1:100

**Concentration:** 1 mg/ml**Host Species:** Mouse**Format:** Liquid**Clonality:** Monoclonal**Isotype:****Purity:** Purified from ascites**Preservative:** no

**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 50% glycerol

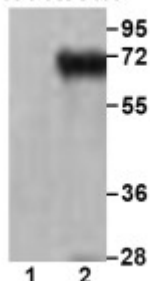
**Species Reactivity:** Recognizes R361H mutant, but not wild type SMAD4 of vertebrates.

**Storage Conditions:** Store at –20°C. Avoid repeated freezing and thawing

## Western blot:

SMAD4 protein

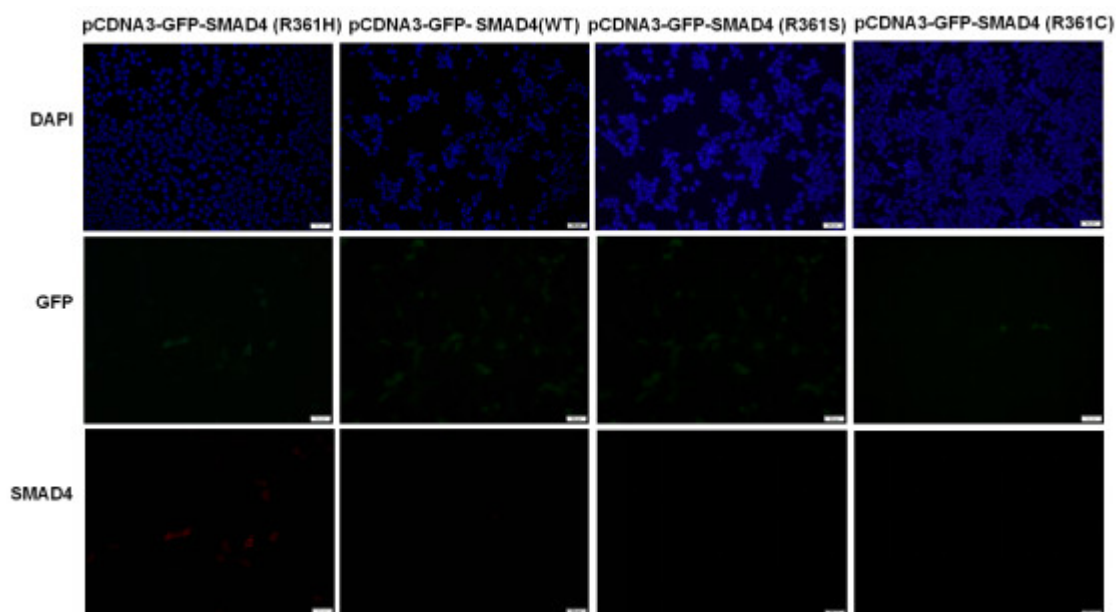
WT R361H



WB: Anti- SMAD4 (R361H) mAb

Western blot analysis of recombinant SMAD4(R361H) and wild type proteins. Purified His-tagged SMAD4(R361H) protein (lane2) and corresponding wild type protein (lane1) were blotted with Anti-SMAD4(R361H) monoclonal antibody (Cat. #26422).

## Immunofluorescence:



Immunofluorescence of cells expressing SMAD4 proteins with Anti-SMAD4(R361H) antibody. HEK293T cells were transfected with pCDNA3-GFP-SMAD4(R361H) plasmid pCDNA3-GFP-SMAD4 (WT) plasmid, pCDNA3-GFP-SMAD4 (R361S) plasmid or pCDNA3-GFP-SMAD4 (R361C) plasmid, then fixed and stained with Anti-SMAD4(R361H) monoclonal antibody (Cat. #26422).