

SMAD4 RABBIT PAB

Cat.#: S216282

Product Name: Anti-SMAD4 Rabbit Polyclonal Antibody

Synonyms: JIP; DPC4; MADH4; MYHRS

UNIPROT ID: Q13485 (Gene Accession - BC002379)

Background: This gene encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to transforming growth factor (TGF)-beta signaling. The product of this gene forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The protein acts as a tumor suppressor and inhibits epithelial cell proliferation. It may also have an inhibitory effect on tumors by reducing angiogenesis and increasing blood vessel hyperpermeability. The encoded protein is a crucial component of the bone morphogenetic protein signaling pathway. The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in this gene have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

Immunogen: Fusion protein of human SMAD4

Applications: ELISA, WB, IHC

Recommended Dilutions: IHC: 50-200;WB: 1000-5000;ELISA: 5000-10000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

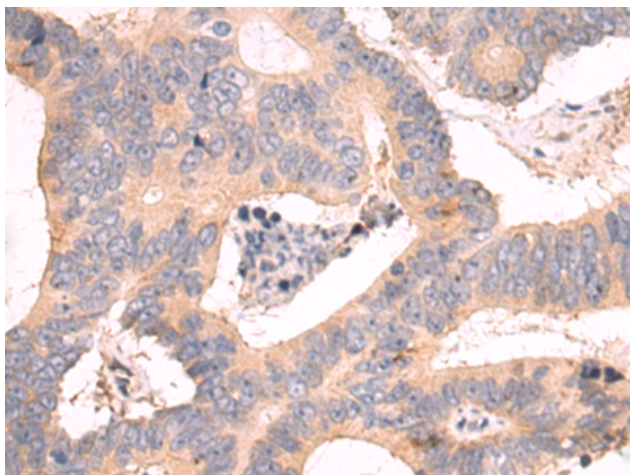
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse, Rat

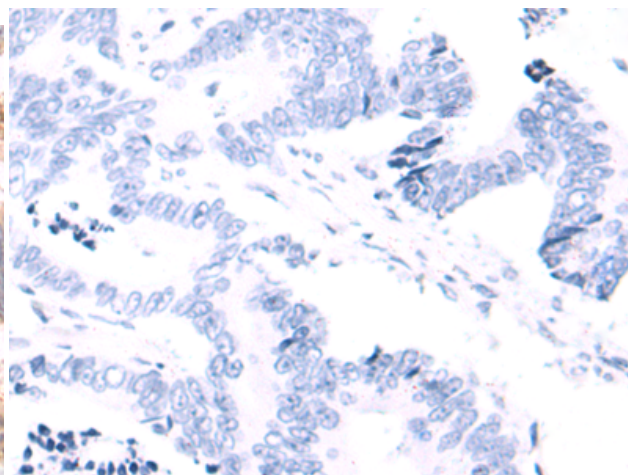
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Cardiovascular

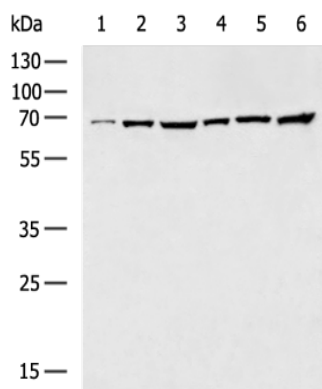
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human colorectal cancer tissue using 216282 (SMAD4 Antibody) at a dilution of 1/70 (Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human colorectal cancer tissue is first treated with the fusion protein and then with 216282 (Anti-SMAD4 Antibody) at dilution 1/70.



Gel: 8%SDS-PAGE, Lysate: 40 μ g;
Lane 1-6: A549, 293T, HeLa, PC3, Jurkat, Raji cell lysates;
Primary antibody: 216282 (SMAD4 Antibody) at dilution 1/1100;
Secondary antibody: HRP-conjugated Goat anti rabbit IgG at 1/5000 dilution;
Exposure time: 30 seconds