

Product datasheet for **TA321708**

SMAD4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 200-1000 WB positive control: 293T cells IHC: 25-100 Positive control: Human thyroid cancer Predicted cell location: Nucleus and Cytoplasm
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to a region derived from 14-227 amino acids of Human Mothers against decapentaplegic homolog 4
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	SMAD family member 4
Database Link:	NP_005350 Entrez Gene 17128 Mouse Entrez Gene 50554 Rat Entrez Gene 4089 Human Q13485



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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 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 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.

Synonyms:

DPC4; JIP; MADH4; MYHRS

Protein Families:

Druggable Genome, Transcription Factors

Protein Pathways:

Adherens junction, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

Product images:

Gel: 8%SDS-PAGE

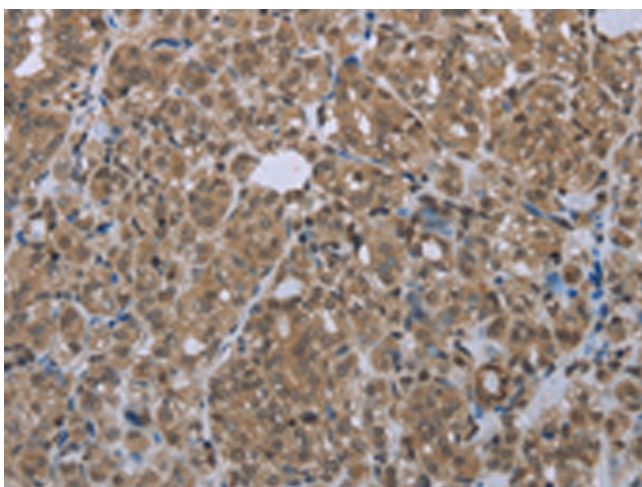
Lysate: 40 µg

Lane: 293T cells

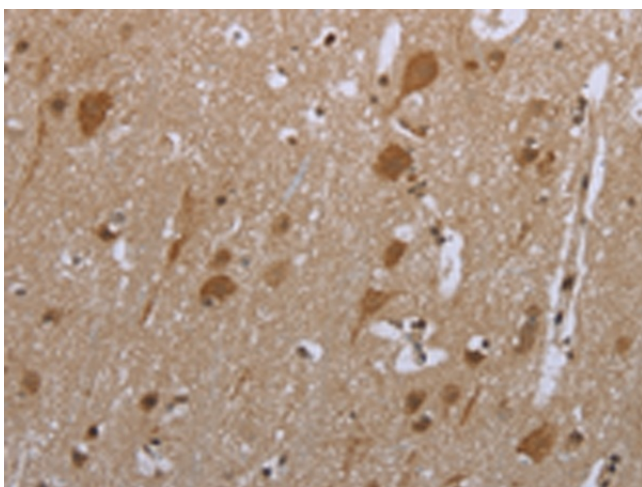
Primary antibody: TA321708 (SMAD4 Antibody) at dilution 1/300

Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution

Exposure time: 2 minutes



Immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using TA321708 (SMAD4 Antibody) at dilution 1/20. (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human brain tissue using TA321708 (SMAD4 Antibody) at dilution 1/20. (Original magnification: $\times 200$)