

WISP1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6255A

Specification

WISP1 Antibody (Center) - Product Information

Application	IHC-P, WB,E
Primary Accession	<u>095388</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	171-200

WISP1 Antibody (Center) - Additional Information

Gene ID 8840

Other Names WNT1-inducible-signaling pathway protein 1, WISP-1, CCN family member 4, Wnt-1-induced secreted protein, WISP1, CCN4

Target/Specificity

This WISP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 171-200 amino acids from the Central region of human WISP1.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

WISP1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

WISP1 Antibody (Center) - Protein Information

Name CCN4 (<u>HGNC:12769</u>)

Synonyms WISP1



Function Downstream regulator in the Wnt/Frizzled-signaling pathway. Associated with cell survival. Attenuates p53-mediated apoptosis in response to DNA damage through activation of AKT kinase. Up-regulates the anti-apoptotic Bcl-X(L) protein. Adheres to skin and melanoma fibroblasts. In vitro binding to skin fibroblasts occurs through the proteoglycans, decorin and biglycan.

Cellular Location Secreted.

Tissue Location

Expressed in heart, kidney, lung, pancreas, placenta, ovary, small intestine and spleen. Isoform 2 is expressed predominantly in scirrhous gastric carcinoma and, weakly in placenta Overexpression is associated with several cancers including breast cancer and colon tumors. Isoform 2 is overexpressed in scirrhous gastric carcinoma

WISP1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WISP1 Antibody (Center) - Images



Western blot analysis of WISP1 Antibody (Center) (Cat.#AP6255a) in HL60 cell line lysates (35ug/lane). WISP1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

WISP1 Antibody (Center) - Background

Wisp1 is a member of the WNT1 inducible signaling pathway (WISP) protein subfamily, which belongs to the connective tissue growth factor (CTGF) family. WNT1 is a member of a family of cysteine-rich, glycosylated signaling proteins that mediate diverse developmental processes. The CTGF family members are characterized by four conserved cysteine-rich domains: insulin-like growth factor-binding domain, von Willebrand factor type C module, thrombospondin domain and C-terminal cystine knot-like domain. Wisp1 may be downstream in the WNT1 signaling pathway that is relevant to malignant transformation. It is expressed at a high level in fibroblast cells, and overexpressed in colon tumors. The encoded protein binds to decorin and biglycan, two members of a family of small leucine-rich proteoglycans present in the extracellular matrix of connective tissue, and possibly prevents the inhibitory activity of decorin and biglycan in tumor cell proliferation. It also attenuates p53-mediated apoptosis in response to DNA damage through activation of the Akt kinase. It is 83% identical to the mouse protein at the amino acid level.

WISP1 Antibody (Center) - References

Hocevar, B.A., et al., EMBO J. 22(12):3084-3094 (2003). Tanaka, S., et al., Hepatology 37(5):1122-1129 (2003). Soon, L.L., et al., J. Biol. Chem. 278(13):11465-11470 (2003). Su, F., et al., Genes Dev. 16(1):46-57 (2002). Xie, D., et al., Cancer Res. 61(24):8917-8923 (2001). WISP1 Antibody (Center) - Citations • WISP-2 in human gastric cancer and its potential metastatic suppressor role in gastric

 WISP-2 in human gastric cancer and its potential metastatic suppressor role in gastric cancer cells mediated by JNK and PLC-γ pathways.