

WISP1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6255a**Specification**

WISP1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [O95388](#)
Other Accession [WISP1_HUMAN](#)

WISP1 Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP6255a](/product/products/AP6255a) was selected from the Center region of human WISP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

WISP1 Antibody (Center) Blocking Peptide - Protein Information

Name CCN4 ([HGNC:12769](#))

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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

WISP1 Antibody (Center) Blocking Peptide - Images**WISP1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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).