

**Goat Anti-WISP1 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF2160a

**Specification**

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**Goat Anti-WISP1 Antibody - Product Information**

Application	WB, IF, FC
Primary Accession	<a href="#">O95388</a>
Other Accession	<a href="#">NP_543028</a> , <a href="#">8840</a> , <a href="#">22402 (mouse)</a> , <a href="#">65154 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	40331

**Goat Anti-WISP1 Antibody - 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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-WISP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-WISP1 Antibody - 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

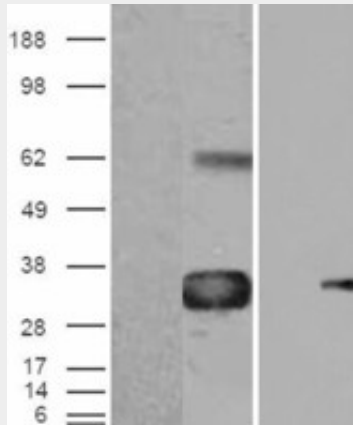
Expressed in heart, kidney, lung, pancreas, placenta, ovary, small intestine and spleen. Isoform 2 is expressed predominantly in scirrhous gastric carcinoma and, weakly in placenta. Overexpression is associated with several cancers including breast cancer and colon tumors. Isoform 2 is overexpressed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

#### Goat Anti-WISP1 Antibody - Protocols

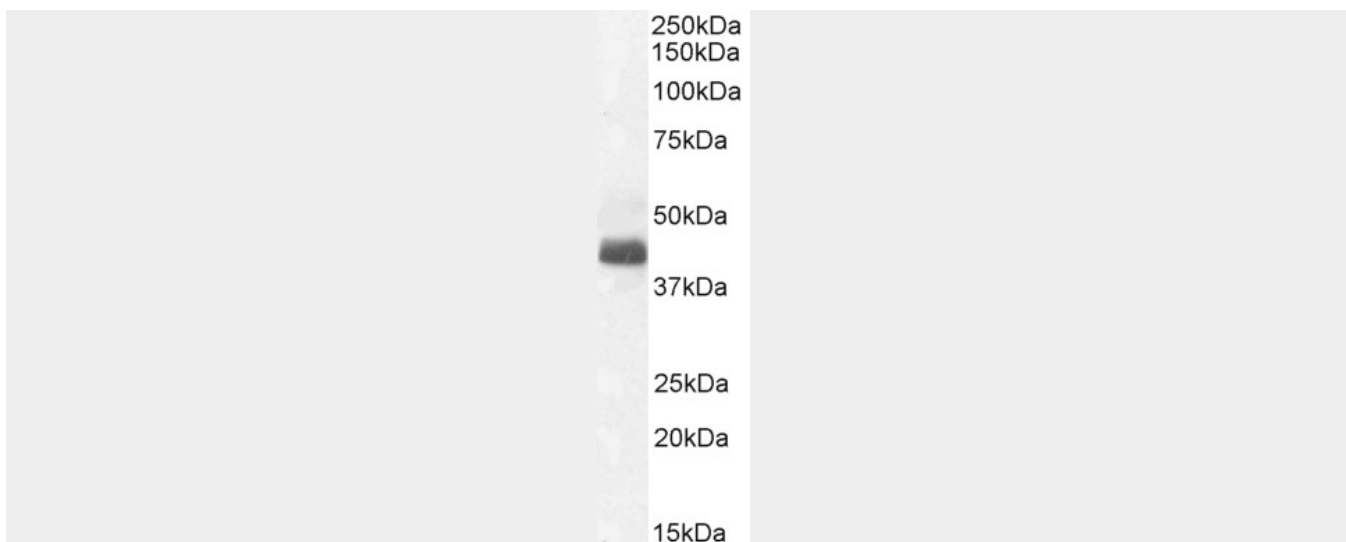
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

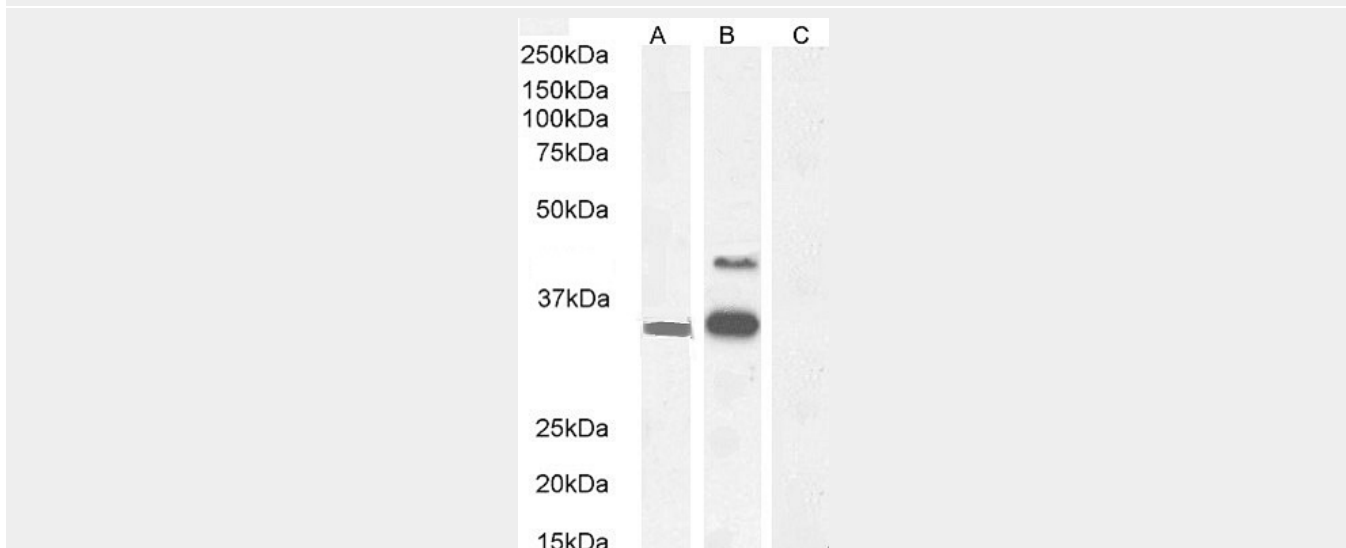
#### Goat Anti-WISP1 Antibody - Images



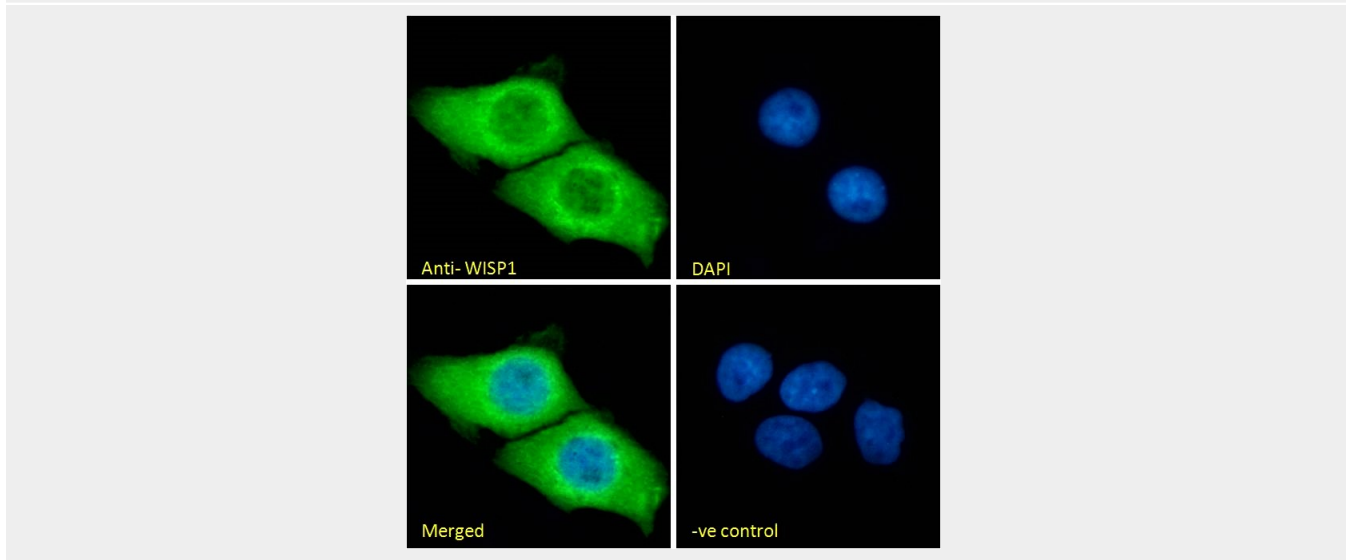
HEK293 overexpressing WISP1 (RC214390) with C-terminal tag (DYKDDDDK) and probed with anti-DYKDDDDK in the left panel and with AF2160a in the right panel (mock transfection in first lane in each panel), tested by Origene.



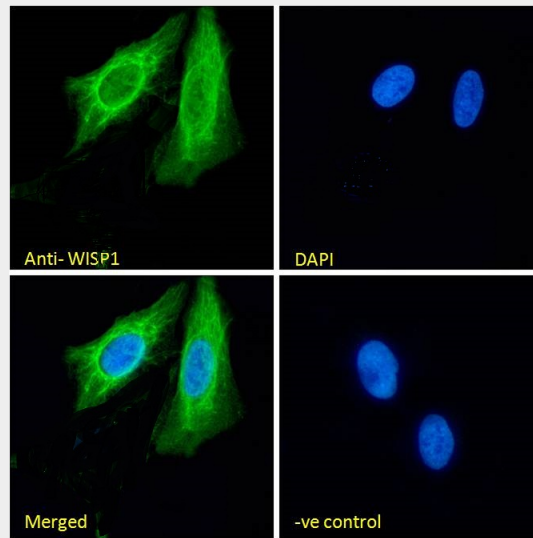
EB08178 (0.1µg/ml) staining of Human Tonsil lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



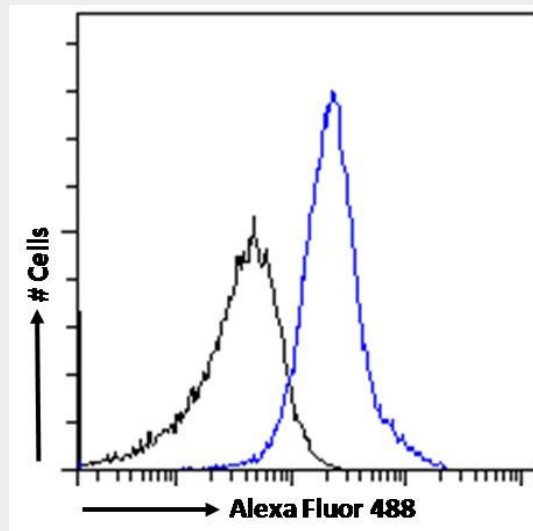
EB08178 (0.3µg/ml) staining of Caco-2 cell lysate 1 (A) and Caco-2 cell lysate 2 (B) + peptide (C). (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB08178 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b



EB08178 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b



EB08178 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

### Goat Anti-WISP1 Antibody - Background

This gene encodes 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. This gene 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. Alternative splicing of this gene generates 2 transcript variants.

### **Goat Anti-WISP1 Antibody - References**

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.

Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.

Single nucleotide polymorphisms in Wnt signaling and cell death pathway genes and susceptibility to colorectal cancer. Frank B, et al. Carcinogenesis, 2010 Aug. PMID 20403915.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

WNT1-inducible signaling pathway protein-1 activates diverse cell survival pathways and blocks doxorubicin-induced cardiomyocyte death. Venkatesan B, et al. Cell Signal, 2010 May. PMID 20074638.