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WISP3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6257A

Product Information

Application	WB, IHC-P, E
Primary Accession	O95389
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2145/2146
Calculated MW	39293
Antigen Region	305-335

Additional Information

Gene ID	8838
Other Names	WNT1-inducible-signaling pathway protein 3, WISP-3, CCN family member 6, WISP3, CCN6
Target/Specificity	This WISP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 305-335 amino acids from the Central region of human WISP3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	WISP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCN6 (HGNC:12771)
Function	Plays a role in mitochondrial electron transport and mitochondrial respiration (PubMed:27252383). Through its regulation of the mitochondrial function may play a role in normal postnatal skeletal growth and cartilage homeostasis (PubMed:10471507, PubMed:27252383).

Cellular Location	Secreted. Mitochondrion. Note=Associated with membranes.
Tissue Location	Predominant expression in adult kidney and testis and fetal kidney. Weaker expression found in placenta, ovary, prostate and small intestine (PubMed:10471507, PubMed:9843955). Also expressed in skeletally-derived cells such as synoviocytes and articular cartilage chondrocytes (PubMed:10471507).

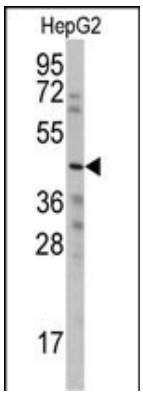
Background

WISP3 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. WISP3 is overexpressed in colon tumors. It may be downstream in the WNT1 signaling pathway that is relevant to malignant transformation. Mutations of the WISP3 gene are associated with progressive pseudorheumatoid dysplasia, an autosomal recessive skeletal disorder, indicating that the gene is essential for normal postnatal skeletal growth and cartilage homeostasis.

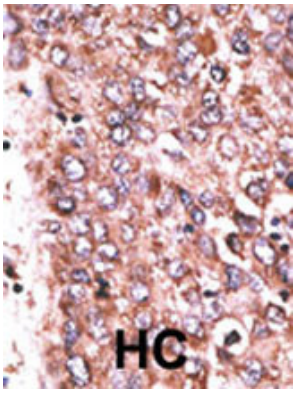
References

Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003).
Tanaka, S., et al., Gastroenterology 123(1):392-393 (2002).
Kleer, C.G., et al., Oncogene 21(20):3172-3180 (2002).
Hurvitz, J.R., et al., Nat. Genet. 23(1):94-98 (1999).
Pennica, D., et al., Proc. Natl. Acad. Sci. U.S.A. 95(25):14717-14722 (1998).

Images



Western blot analysis of anti-WISP3 Antibody (Center) (Cat.#AP6257a) in HepG2 cell line lysates (35ug/lane). WISP3 (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.

Citations

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