10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Wnt-5a Recombinant Rabbit mAb

Catalog # AP98680

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P41221
Other Accession	P41221
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	42339
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Wnt family.
SUBUNIT	Interacts with PORCN. Interacts with WLS.
Post-translational modifications	Palmitoylation is necessary for stimulation of cell migration, inhibition of the beta-catenin pathway and receptor binding. Glycosylation is necessary for secretion but not for activity.
DISEASE	Defects in WNT5A are the cause of Robinow syndrome autosomal dominant (DRS) [MIM:180700]. A disease characterized by short-limb dwarfism, costovertebral segmentation defects and abnormalities of the head, face and external genitalia. The clinical signs are generally milder in dominant cases.
Background Descriptions	The WNT gene family consists of structurally related genes which encode secreted signaling proteins. These proteins have been implicated in oncogenesis and in several developmental processes, including regulation of cell fate and patterning during embryogenesis. This gene encodes a member of the WNT family that signals through both the canonical and non-canonical WNT pathways. This protein is a ligand for the seven transmembrane receptor frizzled-5 and the tyrosine kinase orphan receptor 2. This protein plays an essential role in regulating developmental pathways during embryogenesis. This protein may also play a role in oncogenesis. Mutations in this gene are the cause of autosomal dominant Robinow syndrome. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2012],

Additional Information

Gene ID	7474
Other Names	hWNT5A; 8030457G12Rik; Wnt-5a; WNT5A_HUMAN; WNT5A; WNT5A_MOUSE; Q5PY99_RAT; WNT5A_RAT; Wnt family member 5A; wingless-type MMTV integration site family, member 5A; WNT-5A protein; Protein Wnt-5a
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	WNT5A
Function	Ligand for members of the frizzled family of seven transmembrane receptors. Can activate or inhibit canonical Wnt signaling, depending on receptor context. In the presence of FZD4, activates beta-catenin signaling. In the presence of ROR2, inhibits the canonical Wnt pathway by promoting beta-catenin degradation through a GSK3-independent pathway which involves down-regulation of beta- catenin-induced reporter gene expression (By similarity). Suppression of the canonical pathway allows chondrogenesis to occur and inhibits tumor formation. Stimulates cell migration. Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor (PubMed:15735754). Mediates motility of melanoma cells (PubMed:17426020). Required during embryogenesis for extension of the primary anterior-posterior axis and for outgrowth of limbs and the genital tubercle. Inhibits type II collagen expression in chondrocytes (By similarity).
Cellular Location	Secreted, extracellular space, extracellular matrix. Secreted
Tissue Location	Expression is increased in differentiated thyroid carcinomas compared to normal thyroid tissue and anaplastic thyroid tumors where expression is low or undetectable. Expression is found in thyrocytes but not in stromal cells (at protein level) (PubMed:15735754). Detected in neonate heart and lung (PubMed:8288227)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.