

Wnt5a Rabbit mAb

Catalog # AP76261

Product Information

Application	WB, FC
Primary Accession	P41221
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	42339

Additional Information

Gene ID	7474
Other Names	WNT5A
Dilution	WB~~1:500-1:1000 FC~~1:20
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

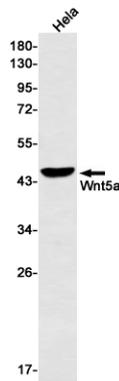
Tissue Location

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)

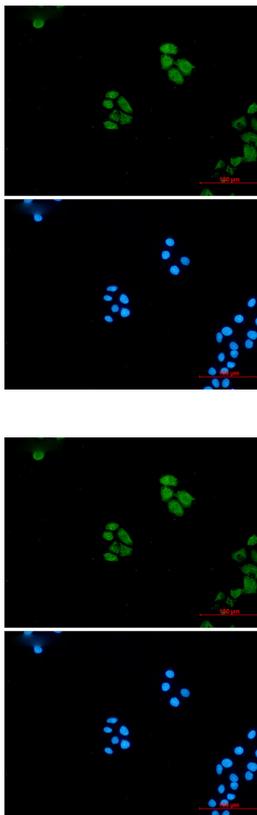
Background

WNT5A: wingless-type MMTV integration site family, member 5A. Entrez Protein: NP_003383. 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 is a member of the WNT gene family. It encodes a protein which shows 98%, 98% and 87% amino acid identity to the mouse, rat and the xenopus Wnt5A protein, respectively. The experiments performed in *Xenopus laevis* embryos identified that human frizzled-5 (hFz5) is the receptor for the Wnt5A ligand and the Wnt5A/hFz5 signaling mediates axis induction.

Images



Western blot analysis of Wnt5a in HeLa lysates using Wnt5a antibody.



Immunocytochemistry analysis of Wnt5a (green) in HeLa cells using Wnt5a antibody and DAPI (blue)

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