

Anti-Wnt5a Picoband Antibody

Catalog # ABO11779

## Specification

# Anti-Wnt5a Picoband Antibody - Product Information

ApplicationIHCPrimary AccessionP41221HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Protein Wnt-5a(WNT5A) detection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-Wnt5a Picoband Antibody - Additional Information

Gene ID 7474

Other Names Protein Wnt-5a, WNT5A

Calculated MW 42339 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br> <br> Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization** Secreted, extracellular space, extracellular matrix.

#### **Tissue Specificity**

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).

Protein Name Protein Wnt-5a

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human Wnt5a recombinant protein (Position: D184-D303). Human Wnt5a shares 100% amino acid (aa) sequence identity with both mouse and rat Wnt5a.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the Wnt family.

# Anti-Wnt5a Picoband Antibody - 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:<a href="http://www.uniprot.org/citations/15735754" target="\_blank">15735754</a>). Mediates motility of melanoma cells (PubMed:<a href="http://www.uniprot.org/citations/15735754" target="\_blank">17426020</a>). 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)

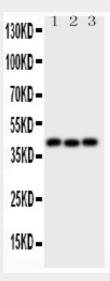
## Anti-Wnt5a Picoband Antibody - Protocols

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

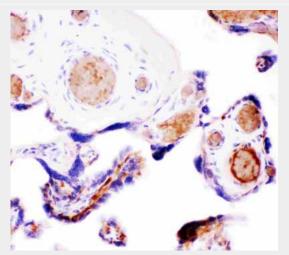
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



# Anti-Wnt5a Picoband Antibody - Images



Anti-Wnt5a Picoband antibody, ABO11779-1.jpgAll lanes: Anti-WNT5A(ABO11779) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: HT1080 Whole Cell Lysate at 40ugPredicted bind size: 41KDObserved bind size: 41KD



IHC(P): Human Placenta Tissue Anti-Wnt5a Picoband Antibody - Background

Protein Wnt-5a is a protein that in humans is encoded by the WNT5A gene. This gene is a member of the WNT gene family. The WNTs comprise a large class of secreted proteins that control essential developmental processes such as embryonic patterning, cell growth, migration, and differentiation. It is mapped to 3p14.3. WNT5A is highly expressed in the dermal papilla of depilated skin. This protein plays an essential role in regulating developmental pathways during embryogenesis. And this protein may also play a role in oncogenesis. WNT5A and DVL can promote axon differentiation mediated by the PAR3-PAR6-aPKC complex.