# abcam

## Product datasheet

## Recombinant Human Wnt5a protein ab204627

3 References 1 Image

**Description** 

Product name Recombinant Human Wnt5a protein

Purity > 95 % SDS-PAGE.

Purified by Nickel Sepharose HighTrap GE Endotoxin level: < 0.1 ng per  $\mu g$  of Wnt5a

**Expression system** Escherichia coli

Accession P41221

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence MIIGAQPLCSQLAGLSQGQKKLCHLYQDHMQYIGEGAKTGI

**KECQYQFRH** 

RRWNCSTVDNTSVFGRVMQIGSRETAFTYAVSAAGVVNA

**MSRACREGELS** 

TCGCSRAARPKDLPRDWLWGGCGDNIDYGYRFAKEFVD

**ARERERIHAKGS** 

YESARILMNLHNNEAGRRTVYNLADVACKCHGVSGSCSL

KTCWLQLADFR

KVGDALKEKYDSAAAMRLNSRGKLVQVNSRFNSPTTQDL

**VYIDPSPDYCV** 

RNESTGSLGTQGRLCNKTSEGMDGCELMCCGRGYDQFK

TVQTERCHCKFH

WCCYVKCKKCTEIVDQFVCKLEHHHHH

Predicted molecular weight 37 kDa including tags

Amino acids 62 to 380

Tags His tag C-Terminus

Additional sequence information NP\_003383.2. This product is for the mature full length protein. The signal peptide and propeptide

are not included.

**Specifications** 

Our Abpromise guarantee covers the use of ab204627 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Applications SDS-PAGE

Form Lyophilized

Additional notes No direct biological data available at the moment but ab204627 binds to immobilized Human

sROR2 in a functional ELISA.

#### **Preparation and Storage**

**Stability and Storage** Shipped at 4°C. Store at -20°C. Avoid freeze / thaw cycle.

Constituent: 0.3% Acetic acid

**Reconstitution** Reconstitute in water to a concentration of 0.1 mg/ml. This solution can be diluted in water or other

buffer solutions or stored at -20°C.

#### General Info

**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. 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. Mediates motility of melanoma cells. Required during embryogenesis for extension of

the primary anterior-posterior axis and for outgrowth of limbs and the genital tubercle. Inhibits type

Il collagen expression in chondrocytes.

**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).

Sequence similarities Belongs to the Wnt family.

Post-translational

modifications

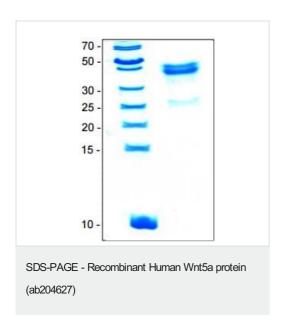
Palmitoylation is necessary for stimulation of cell migration, inhibition of the beta-catenin pathway

and receptor binding.

Glycosylation is necessary for secretion but not for activity.

**Cellular localization** Secreted > extracellular space > extracellular matrix.

#### **Images**



15% SDS-PAGE analysis of ab204627 under reducing conditions and stained with Coomassie blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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