## Recombinant Human Wnt5a protein ab204627

### Description

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>Recombinant Human Wnt5a protein</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>&gt; 95 % SDS-PAGE. ab204627 was determined to be &gt; 95% pure by SDS-PAGE &amp; visualized by silver stain.</td>
</tr>
<tr>
<td><strong>Expression system</strong></td>
<td>Escherichia coli</td>
</tr>
<tr>
<td><strong>Accession</strong></td>
<td>P41221</td>
</tr>
<tr>
<td><strong>Protein length</strong></td>
<td>Full length protein</td>
</tr>
<tr>
<td><strong>Animal free</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Nature</strong></td>
<td>Recombinant</td>
</tr>
<tr>
<td><strong>Species</strong></td>
<td>Human</td>
</tr>
</tbody>
</table>

**Sequence**

```
MIIGAQPLCSQLAGLSQQKCLCHLYQDHMQYIGEGAKTGI
KECQYQFRH
RRWNCSTVDNTSFGRVMQISRETAFTYAVSAAGVVNA
MSRACREGELS
TCGCSRAARPKDLPRDWLGCGDNIDGVRFAKEFVD
ARERERHAKGS
YESARILMNHLHNNEAGRRTVYNLADVACKCHGVSGSCSL
KTCWLQLADFR
KVDALKEKYDSAAAMRLNSRGKLQVNSRFNSPTTDL
VYIDSPDYC
RVRESTGSLGTQRLCNKTSEGMDGCELERCMCCGREGYDQFK
TVQTERCHKFH
WCCYVKKKKCTEIVDQFVCKLEHCHCHH
```

**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.
<table>
<thead>
<tr>
<th>Applications</th>
<th>SDS-PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Lyophilized</td>
</tr>
<tr>
<td>Additional notes</td>
<td>No direct biological data available at the moment but ab204627 binds to immobilized Human sROR2 in a functional ELISA.</td>
</tr>
</tbody>
</table>

### 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 II 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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