

Recombinant Human WNT-7A
Catalog # PBG10483**Specification**

Recombinant Human WNT-7A - Product Information**Recombinant Human WNT-7A - Additional Information****Description**

Wnt-7a belongs to the Wnt family of signaling proteins that play a key role in maintaining the integrity of embryonic and adult tissues. It is expressed in placenta, kidney, testis, uterus, fetal lung and fetal and adult brain. Most Wnt proteins can signal through a mechanism called the canonical Wnt pathway, in which Wnt proteins bind to and activate seven-pass transmembrane receptors of the Frizzled family ultimately leading to the disruption of β -Catenein degradation. Intracellular accumulation of β -Catenin increases translocation of the protein into the nucleus where it binds to TCF/LEF transcription factors and induces the expression of numerous genes. Increased Wnt/ β -Catenein signaling is associated with tumorigenesis in a diverse set of human cancers. However, Wnt-7a/Frizzled-9 signaling has been shown to act as a tumor suppressor in non-small cell lung cancers. Recombinant human Wnt-7a is a 35.5 kDa glycoprotein containing 318 amino acids. Due to glycosylation, Wnt-7a migrates between 40-55 kDa by SDS-PAGE gel under unreduced conditions

Biological Activity

Determined by its ability to inhibit Wnt3a induced alkaline phosphatase production in MC3T3-E1 cells. The expected ED_{50} for this effect is 40-60 ng/ml.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is <0.1 ng/ μ g of protein (<1 EU/ μ g).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human WNT-7A is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human WNT-7A - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human WNT-7A - Images