

## 32-20571: Recombinant Human Wnt-7a(Discontinued)

**Reactivity :** Chicken, Human

### Description

**Source:**HEK293 cells

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 Beta -catenin degradation. Intracellular accumulation of Beta -catenin increases translocation of the protein into the nucleus, where it binds to TCF/LEF transcription factors to induce the expression of numerous genes. Increased Wnt/Beta -catenin 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.

### Product Info

**Amount :** 3 µg / 15 µg

**Purification :** Purity: >= 80% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** LGASIIICNKI PGLAPRQRAI CQSRPDIIIV IGEQSQMGLD ECQFQFRNGR WNCSALGERT VFGKELKVGS  
REAAFTYAI AAGVAHAITA ACTQGNLSDC GCDKEKQGQY HRDEGWKWGG CSADIRYGIG FAKVFVDARE  
IKQNARTLMN LHNNEAGRKI LEENMKLECK CHGVSGSCTT KTCWTTLPQF RELGYVLKDK YNEAVHVEPV  
RASRNKRPTF LKIKKPLSYR KPMDTDLVYI EKSPNYCEED PVTGSGVTQG RACNKTAPQA SGCDLMCCGR  
GYNTHQYARV WQCNCCKFHCW CYVKCNCSE RTEMYTCK

### Application Note

Determined by its ability to inhibit Wnt-3a-induced alkaline phosphatase production in MC3T3-E1 cells. The expected  $ED_{50}$  for this effect is 40-60 ng/ml.