# Wnt-3a (mouse), (recombinant)

Modulator of embryogenesis, cell proliferation, stem cell differentation, and bone, glucose and lipid metabolism

Wnt expression and signal transduction have been identified as critical components in regulating embryogenesis, cell proliferation, and bone, glucose and lipid metabolism. Wnt-3a signalling also plays a role in regulating the differentation of stem cells. Wnt-3a is a member of the highly conserved, structurally related cysteine-rich Wnt family glycoproteins important for normal developmental processes and oncogenesis. Wnt-3a proteins are secreted and bind to receptors of the Frizzled and LRP families on the cell surface, which leads to the stabilization of  $\beta$ -catenin and increase of  $\beta$ -catenin translocation into the nucleus where it binds to TCF/LEF transcription factors to promote gene expression. The predicted mouse Wnt-3a protein of 352 amino acid residues and contains an N-terminal signal peptide for secretion. It shares 96% amino acid identity to human Wnt-3a protein. Due to glycosylation, it migrates at an apparent molecular weight of ~40 kDa by SDS-PAGE analysis under reducing conditions.

### **Ordering Information**

**Order Online** »

**ENZ-60001-C001** 1μg

Manuals, SDS & CofA

View Online »

#### **Handling & Storage**

**Use/Stability** Stable for at least 12 months after receipt when stored, as supplied, at -80°C. Following

reconstitution, stable for three months when stored at or below -20°C.

Short Term Storage -80°C

Long Term Storage -80°C

Shipping Dry Ice

## Regulatory Status RUO - Research Use Only

#### **Product Details**

Biological Activity Wnt-3a can induce β-catenin mediated response in a

TCF/LEF reporter gene luciferase assay.

**Endotoxin Content** Less than 0.2 ng per  $\mu$ g (2EU/ $\mu$ g)

Formulation Lyophilized solid.

**MW** ~40kDa (SDS-PAGE)

Purity >75% by SDS-PAGE and >75% by HPLC analyses

Reconstitution Prepare 5 μg/mL stock solution of Wnt3a by adding 200 μL

deionized water into the vial of lyophilized Wnt3a.

Source Cell culture

UniProt ID P27467

Last modified: May 29, 2024

