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 β-catenin and increase of β-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 µg (2EU/µg)

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