

Recombinant Murine WNT-3a
Catalog # PBG10338**Specification**

Recombinant Murine WNT-3a - Product Information**Recombinant Murine WNT-3a - Additional Information****Description**

Wnt-3a belongs to the Wnt family of signaling proteins that play a key role in maintaining the integrity of embryonic and adult tissues. Expression of Wnt-3a occurs primarily along the dorsal midline across overlapping regions of the Central Nervous System (CNS). Wnt-3a signaling is essential for various morphogenetic events including embryonic patterning, cell determination, cell proliferation, CNS development, and cytoskeletal formation. Like other members of this family, Wnt-3a contains a highly conserved lipid modified cysteine rich domain that is essential for cell signaling. During a biochemical process called the canonical Wnt pathway; Wnt family members 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 to promote gene expression. Lack of Wnt signaling disrupts transcriptional activation of tumor suppressor genes and has shown to result in neoplastic transformation, oncogenesis, and human degenerative diseases. Recombinant murine Wnt-3a is a monomeric glycoprotein containing 334 amino acid residues. Due to glycosylation, the murine Wnt-3a migrates at an apparent molecular weight of approximately 38.0-41.0 kDa by SDS-PAGE analysis under non-reducing conditions.

BiologicalActivity

The **ED₅₀** was determined by its ability to induced alkaline phosphatase production by CCL-226 cells. The expected **ED₅₀** for this effect is 0.4-0.6 ng/ml.

Authenticity

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

Endotoxin

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

Protein Content

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

Storage

-20°C

Precautions

Recombinant Murine WNT-3a is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Murine WNT-3a - 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 Murine WNT-3a - Images