

Recombinant Mouse WNT7A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51336

Size: 10ug, 100ug

Protein Name: Protein Wnt-7a

Synonym: Wnt7a, Wnt-7a

UniProt ID: P24383

UniProt Link: www.uniprot.org/uniprotkb/P24383/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 349 AA

Molecular Weight: 39 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTRKARRCLGHLFLSLGIVYLRIGGFSSVVALGASIICNKIPGLAPRQRAICQSRPDAIIVIGEGSQMGL
DECQFQFRNGRWNCALGERTVFGKELKVGSRFAAFTYAIIAAGVAHAITAACQGNLSDCGCDKE
KQGQYHRDEGWKWGGCSADIRYGIGFAKVFDAREIKQNARTLMNLHNNEAGRKILEENMKLECKC
HGVSGSCTTKTCWTTLPQFRELGYVLKDKYNEAVHVEPVASRNKRPTFLKIKKPLSYRKPMDDLV
YIEKSPNYCEEDPVTGSGVTQGRACNKTAPQASGCDLMCCGRGYNTHQYARVWQCNCCKFHWCCY
VKCNTCSERTEMYTCK

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Protein Wnt-7a produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Ligand for members of the frizzled family of seven transmembrane receptors that functions in the canonical Wnt/beta-catenin signaling pathway (PubMed:18230341, PubMed:20530549, PubMed:23629626). Plays an important role in embryonic development, including dorsal versus ventral patterning during limb development, skeleton development and urogenital tract development (PubMed:7885472, PubMed:9769174, PubMed:9790192). Required for central nervous system (CNS) angiogenesis and blood-brain barrier regulation (PubMed:28803732). Required for normal, sexually dimorphic development of the Mullerian ducts, and for normal fertility in both sexes (PubMed:9790192). Required for normal neural stem cell proliferation in the hippocampus dentate gyrus (PubMed:23629626). Required for normal progress through the cell cycle in neural progenitor cells, for self-renewal of neural stem cells, and for normal neuronal differentiation and maturation (PubMed:23629626). Promotes formation of synapses via its interaction with FZD5 (PubMed:20530549).

Subcellular Localization: Secreted, extracellular space, extracellular matrix . Secreted .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.