

Recombinant Human WNT7A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51067

Size: 10ug, 100ug

Protein Name: Protein Wnt-7a

Synonym: WNT7A

UniProt ID: O00755

UniProt Link: www.uniprot.org/uniprotkb/O00755/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 349 AA

Molecular Weight: 39 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNRKARRCLGHLFLSLGMVYLRIGGFSSVVALGASIICNKIPGLAPRQRAICQSRPDAlIVIGEGSQMG
LDECQFQFRNGRWNCsALGERTVFGKELKVGsREAAFTYAIIAAGVAHAITAActQGnLSDCGCDK
EKQGQYHRDEGWKWGGCSADIRYGIGFAKVFDAREIKQNARTLMNLHNNEAGRKILEENMKLECK
CHGVSGSCTTKTCWTTLPQFRELGYVLKDKYNEAVHVEPVRASRNKRPTFLKIKKPLSYRKPMDTD
LVYIEKSPNYCEEDPVTGSGVTQGRACNKTAPQASGCDLMCCGRGYNTHQYARVWQCNCCKFHWC
CYVKCNTCSERTEMYTCK

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 (By similarity). Plays an important role in embryonic development, including dorsal versus ventral patterning during limb development, skeleton development and urogenital tract development (PubMed:16826533). Required for central nervous system (CNS) angiogenesis and blood-brain barrier regulation (PubMed:30026314). Required for normal, sexually dimorphic development of the Mullerian ducts, and for normal fertility in both sexes (By similarity). Required for normal neural stem cell proliferation in the hippocampus dentate gyrus (By similarity). 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 (By similarity). Promotes formation of synapses via its interaction with FZD5 (By similarity).

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.