

Recombinant Mouse WNT5A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51326

Size: 10ug, 100ug

Protein Name: Protein Wnt-5a

Synonym: Wnt5a, Wnt-5a

UniProt ID: P22725

UniProt Link: www.uniprot.org/uniprotkb/P22725/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 380 AA

Molecular Weight: 42 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MKKPIGILSPGVALGTAGGAMSSKFFLMALATFFSFAQVVEANSWWSLGMNPNVQMSEVYIIGAQP
LCSQLAGLSQGQKKLCHLYQDHMQYIGEGAKTGIKECQYQFRHRRWNCSTVDNTSVFGRVMQIGS
RETAFTYAVSAAGVVNAMSRACREGELSTCGCSRAARPKDLPRDWLWGGCGDNIDYGYRFAKEFV
DARERERIHAKGSYESARILMNLHNNEAGRRTVYNLADVACKCHGVSGCSLKTCLWLQLADFRKVG
DALKEYDSAAAMRLNSRGKLVQVNSRFNSPTTQDLVYIDPSPDYCVRNESGSLGTQGRLCNKTS
EGMDGCELMCCGRGYDQFKTVQTERCHCKFWCCYVKCKKCTEIVDQFVCK

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-5a 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 (PubMed:17117926). Can activate or inhibit canonical Wnt signaling, depending on receptor context (PubMed:16602827). In the presence of FZD4, activates beta-catenin signaling. In the presence of ROR2, inhibits the canonical Wnt pathway by promoting beta-catenin degradation through a GSK3-independent pathway which involves down-regulation of beta-catenin-induced reporter gene expression (PubMed:16602827). Suppression of the canonical pathway allows chondrogenesis to occur and inhibits tumor formation. Stimulates cell migration (PubMed:17117926). Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor. Mediates motility of melanoma cells (By similarity). Required during embryogenesis for extension of the primary anterior-posterior axis and for outgrowth of limbs and the genital tubercle (PubMed:10021340). Inhibits type II collagen expression in chondrocytes (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.