

Recombinant Rat GPHA2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52711

Size: 10ug, 100ug

Protein Name: Glycoprotein hormone alpha-2 (Putative secreted protein Zsig51)
(Thyrostimulin subunit alpha)

Synonym: Gpha2, Gpa2, Zsig51

UniProt ID: Q925Q4

UniProt Link: www.uniprot.org/uniprotkb/Q925Q4/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 130 AA

Molecular Weight: 14 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPMAPRVLLFCLLGLAVTEGHGLEAAVPIPGCHLHPFNVTVRSDRHGTCQGSHVAQACVGHCESSA
FPSRYSVLVASGYRHNITSVSQCCTISSLKKVRVWLHCVGNQRGELEIFTARACQCDMCRLSRY

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 Glycoprotein hormone alpha-2 (Putative secreted protein Zsig51) (Thyrostimulin subunit alpha) 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: Functions as a heterodimeric glycoprotein hormone with GPHB5 able to bind and activate the thyroid-stimulating hormone receptor (TSHR), leading to increased cAMP production. Plays a central role in controlling thyroid cell metabolism.

Subcellular Localization: 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.