

Recombinant Rat INHA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52293

Size: 10ug, 100ug

Protein Name: Inhibin alpha chain

Synonym: Inha

UniProt ID: P17490

UniProt Link: www.uniprot.org/uniprotkb/P17490/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 366 AA

Molecular Weight: 39 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVIQPSLLLLLLTLQDVDSCQGPELVRELVLAKVKALFLDALGPPAMDGEGGGPGIRRLPRRHALG
GFMHRTSEPEEEDVSQAILFPATGATCEDQAAAGGLAQEPEEGLFTYVFRPSQHIRSHQVTSACLW
FHTGLDRKSTAASNSSRPLDLLVLSSGGPMAVPVSLGQSPPRWAVLHLAASAFPLLTHPILVLLRC
PLCSCSGRPETTPFLVAHTRARAPSAGERARRSAPSPMPWPWSPAALRLLQRPPEEPSAHAFCHRA
ALNISFQELGWDWRWIVHPPSFIFHYCHGSCGMPTSDLPLVPGAPPTPAQPLFLVPGAKPCCAALPG
SMRSLRVRTTSDGGYSFKYEMVPNLITQHCACI

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 Inhibin alpha chain 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: Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins.; Inhibin A is a dimer of alpha/INHA and beta-A/INHBA that functions as a feedback regulator in the hypothalamic-pituitary-gonadal (HPG) axis. Inhibits the secretion of FSH from the anterior pituitary gland by acting on pituitary gonadotrope cells. Antagonizes activin A by binding to the proteoglycan, betaglycan, and forming a stable complex with and, thereby, sequestering type II activin receptors while excluding type I receptor.; Inhibin B is a dimer of alpha and beta-B that plays a crucial role in the regulation of the reproductive system by inhibiting the secretion of follicle-stimulating hormone (FSH) from the anterior pituitary gland (PubMed:19589860). Thereby, maintains reproductive homeostasis in both males and females. Acts as a more potent suppressor of FSH release than inhibin A (By similarity). Functions as competitive receptor antagonist binding activin type II receptors with high affinity in the presence of the TGF-beta type III coreceptor/TGFBR3L (By similarity).

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.