

Recombinant Rat INHBE Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52685

Size: 10ug, 100ug

Protein Name: Inhibin beta E chain (Activin beta-E chain)

Synonym: Inhbe

UniProt ID: O88959

UniProt Link: www.uniprot.org/uniprotkb/O88959/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 350 AA

Molecular Weight: 39 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGLSNVQLWTILLWALAWVQSTRSACPSCGAPTLTPQGERALVLELAKQQILEGLHLTSRPRITRPL
PQAALTRALRRLQPRSMVPGNREKVISFATSIDKSTSTYRSVLTFQLSPLWSHHLYHARLWLHVPPS
FPATLYLRIFGCGTTRCRGSRFTFLAEHQTTSSGWHALTLPSSGLRSEESGVTKLQLEFRPLDLNSTT
ARLPRLLLDTAGQQRPFLKIRANEPGAGRARRRTPTCESETPLCCRRDHYVDFQELGWRDWILQ
PEGYQLNYCSGQCPHLAGSPGIAASFHSAVFSLLKANNPWPAGSSCCVPTARRPLSLLYLDHNGN
VVKTDVPDMVVEACGCS

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 beta E chain (Activin beta-E 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.; Activin E is a homodimer of INHBE secreted by the liver that plays a crucial role in regulating metabolic homeostasis particularly in lipid metabolism and energy homeostasis. Plays a central role in the regulation of adipose tissue lipolysis by preventing the influx of fatty acids from adipose tissue into the liver. Mechanistically, signals via ACVR1C to activate SMAD2/3 signaling, suppressing PPARG target genes in adipose tissue, thereby reducing liver lipid content and improving glycemic control. Induces beige adipocyte formation and thermogenesis in response to cold exposure.

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.