

Recombinant Rat FOS Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52274

Size: 10ug, 100ug

Protein Name: Protein c-Fos (Cellular oncogene fos) (Proto-oncogene c-Fos)

Synonym: Fos

UniProt ID: P12841

UniProt Link: www.uniprot.org/uniprotkb/P12841/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 380 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MMFSGFNADYEASSSRCSSASPAGDSLSEYYHSPADSFSSMGSPVNTQDFCADLSVSSANFIPTVTA
ISTSPDLQWLQPTLVSSVAPSQTRAPHYPGLPTPSTGAYARAGVVKTMSGGQAQSIGRRGKVEQL
SPEEEEEKRRIRRRERNKMAAAKCRNRRRELDTLQAETDQLEDEKSALQTEIANLLKEKEKLEFILA
RPACKIPNDLGFPEEMSVTSLDLTGGLPEATTPESSEEAFTLPLLNDPEPKPSLEPVKNISNMELKAEP
FDDFLFPASSRPSGSETARSPDVLGSGFYAADWEPLHSSSLGMGPMVTELEPLCTPVVTCTPSC
TTYTSSSFVFTYPEADSFPSCAAHRKGSSSNEPSSDSLSSPTLLAL

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 c-Fos (Cellular oncogene fos) (Proto-oncogene c-Fos) 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: Nuclear phosphoprotein which forms a tight but non-covalently linked complex with the JUN/AP-1 transcription factor. On TGF-beta activation, forms a multimeric SMAD3/SMAD4/JUN/FOS complex, at the AP1/SMAD-binding site to regulate TGF-beta-mediated signaling (By similarity). Has a critical function in regulating the development of cells destined to form and maintain the skeleton. It is thought to have an important role in signal transduction, cell proliferation and differentiation. In growing cells, activates phospholipid synthesis, possibly by activating CDS1 and PI4K2A. This activity requires Tyr-dephosphorylation and association with the endoplasmic reticulum (By similarity).

Subcellular Localization: Nucleus . Endoplasmic reticulum . Cytoplasm, cytosol . Note=In quiescent cells, present in very small amounts in the cytosol. Following induction of cell growth, first localizes to the endoplasmic reticulum and only later to the nucleus. Localization at the endoplasmic reticulum requires dephosphorylation at Tyr-10 and Tyr-30 (By similarity).

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.