Recombinant FOS protein (His tag)

Catalog Number	541972
Synonyms	Cellular oncogene fos; Fos proto-oncogene, AP-1 transcription factor subunit; G0/G1 switch regulatory protein 7; Proto-oncogene c-Fos; Transcription factor AP-1 subunit c-Fos
Species	Human
Expression System	E. coli
Accession	P01100
Molecular Weight	Predictes a molecular mass of 10.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	134-208
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 134-208 aa (P01100) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Our recombinant Human c-Fos protein fragment (residues 134-208) offers researchers a precisely engineered tool for studying the critical bZIP domain functionality. This 75-amino acid fragment provides the essential DNA-binding and dimerization capabilities of the c-Fos transcription factor, enabling focused investigation of AP-1 complex formation and transcriptional regulation mechanisms. The full-length c-Fos protein is a nuclear phosphoprotein that forms a tight heterodimeric complex with JUN/AP-1 transcription factor, creating the functional AP-1 transcription factor complex. This complex plays a pivotal role in signal transduction, cell proliferation, and differentiation processes. c-Fos has a critical function in regulating skeletal development and, in growing cells, activates phospholipid synthesis through activation of CDS1 and PI4K2A. Subcellular localization studies reveal that in quiescent cells, c-Fos is present in minimal amounts in the cytosol, but upon induction of cell growth, it first localizes to the endoplasmic reticulum (requiring dephosphorylation at Tyr-10 and Tyr-30) before translocating to the nucleus. The protein also forms multimeric complexes with SMAD3/SMAD4/JUN at AP1/SMAD-binding sites to regulate TGF-beta-mediated signaling pathways.