Recombinant JUN protein (His tag)

Catalog Number	542025
Synonyms	Activator protein 1; AP1; Proto-oncogene c-Jun; Transcription factor AP-1 subunit Jun; V-jun avian sarcoma virus 17 oncogene homolog; p39
Species	Human
Expression System	E. coli
Accession	P05412
Molecular Weight	Predictes a molecular mass of 11.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	246-331
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 246-331 aa (P05412) 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	Recombinant human Transcription factor Jun (c-Jun) fragment (residues 246-331), encompassing the complete bZIP domain. This high-purity protein is an essential tool for investigating AP-1 transcription factor complex formation, DNA binding mechanisms, and transcriptional regulation in cellular signaling pathways. Transcription factor Jun (c-Jun) is a critical component of the AP-1 transcription complex that recognizes and binds to the AP-1 consensus sequence 5'-TGA[GC]TCA-3'. It primarily functions in the nucleus, where it heterodimerizes with FOS family proteins to enhance DNA binding and transcriptional activity. This protein plays significant roles in activation-induced T-cell death through FASLG/CD95L regulation, steroidogenic gene expression via NR5A1 interaction, and USP28 transcriptional activation in colorectal cancer cells. Additionally, it contributes to viral pathogenesis by activating Epstein-Barr virus BZLF1 expression upon infection. The bZIP domain contained within this recombinant fragment is essential for dimerization and DNA binding functions.