Recombinant SRC protein (His tag)

Catalog Number	544397
Synonyms	Proto-oncogene c-Src; pp60c-src; p60-Src
Species	Human
Expression System	E. coli
Accession	P12931
Molecular Weight	Predictes a molecular mass of 53.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	87-536
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 87-536 aa (P12931) 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 SRC Kinase Fragment (residues 87-536) is a high-purity protein product encompassing the essential SH2 and Protein Kinase domains. This fragment serves as an optimal tool for investigating domain-specific functions of the proto-oncogene tyrosine-protein kinase Src, enabling targeted studies on signal transduction, cytoskeletal organization, and cellular regulation without interference from regulatory regions. Proto-oncogene tyrosine-protein kinase Src (UniProt P12931) is a non-receptor protein tyrosine kinase that integrates signals from diverse cellular receptors including immune receptors, integrins, G protein-coupled receptors, and cytokine receptors. It regulates fundamental biological processes including gene transcription, immune response, cell adhesion, cell cycle progression, apoptosis, migration, and transformation. SRC activates multiple signaling cascades by phosphorylating various substrates such as focal adhesion proteins (PTK2/FAK1, paxillin), cytoskeletal regulators (AFAP1, cortactin), junction proteins (β-catenin, connexin-43), and transcription factors. The protein localizes to multiple cellular compartments including the cell membrane (where it anchors via lipid modification), mitochondria inner membrane, nucleus, cytoskeleton, perinuclear region, and focal adhesions, reflecting its diverse functional roles in cellular signaling and organization.