Recombinant CSK protein (His tag)

Catalog Number	537733
Synonyms	C-Src kinase; Protein-tyrosine kinase CYL
Species	Human
Expression System	E. coli
Accession	P41240
Molecular Weight	Predictes a molecular mass of 52.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	2-450
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 2-450 aa (P41240) 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 CSK (Tyrosine-protein kinase CSK) fragment (residues 2-450) is a high-purity protein that includes the complete SH3, SH2, and Protein kinase domains. This fragment serves as an essential tool for investigating the regulatory mechanisms of Src-family kinases in cellular signaling pathways. Tyrosine-protein kinase CSK (C-Src kinase) is a non-receptor tyrosine-protein kinase crucial for regulating cell growth, differentiation, migration, and immune responses. It functions by phosphorylating the C-terminal tails of Src-family kinases (SFKs) such as LCK, SRC, HCK, FYN, LYN, and YES1, leading to their inactivation through intramolecular interactions. CSK suppresses signaling from various surface receptors, including T-cell and B-cell receptors, by maintaining key effectors like FYN and LCK in an inactive state. Predominantly localized in the cytoplasm and also present at the cell membrane and lipid rafts, CSK is recruited to the plasma membrane to inhibit SFK activity, playing a pivotal role in controlling cellular signaling networks.