Recombinant ROS1 protein (His tag)

Catalog Number	537463
Synonyms	Proto-oncogene c-Ros; Proto-oncogene c-Ros-1; Receptor tyrosine kinase c-ros oncogene 1; c-Ros receptor tyrosine kinase
Species	Human
Expression System	E. coli
Accession	P08922
Molecular Weight	Predictes a molecular mass of 35.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1936-2227
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1936-2227 aa (P08922) 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	Introducing the recombinant human Proto-oncogene tyrosine-protein kinase ROS (ROS1) fragment (residues 1936-2227), a 292-amino acid segment encompassing the complete protein kinase domain. This high-purity fragment is engineered to support investigations into kinase activity, signaling mechanisms, and drug discovery, offering researchers a precise tool for domain-specific functional studies. Proto-oncogene tyrosine-protein kinase ROS (ROS1) is a receptor tyrosine kinase critical for epithelial cell differentiation and proximal epididymal epithelium regionalization, with NELL2 identified as its endogenous ligand. Upon activation, ROS1 initiates downstream pathways such as PI3 kinase-mTOR, STAT3, and VAV3, regulating processes including cell proliferation, survival, and morphology. It localizes to the cell membrane as a single-pass type I membrane protein, facilitating its role in signal transduction. The provided fragment spans the protein kinase domain, enabling focused research on its catalytic functions and contributions to cellular signaling networks.