Recombinant CTRO protein (His tag)

Catalog Number	539414
Synonyms	CRIK; Serine/threonine-protein kinase 21
Species	Human
Expression System	E. coli
Accession	O14578
Molecular Weight	Predictes a molecular mass of 52.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1446-1900
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 1446-1900 aa (O14578) 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 Citron Rho-interacting kinase (CRIK) fragment (amino acids 1446-1900), encompassing the complete CNH domain. This high-purity protein is ideal for investigating kinase activity, Rho/RAC interactions, and cytokinesis mechanisms in cellular and biochemical assays. Citron Rho-interacting kinase (CRIK), encoded by the CIT gene, is a serine/threonine-protein kinase crucial for cytokinesis and central nervous system development. It functions as a RHO/RAC effector, binding specifically to GTP-bound RHO and RAC1, and localizes to the cytoplasm. CRIK regulates KIF14 localization to the central spindle and midbody during cell division and phosphorylates MYL9/MLC2, playing a vital role in contractile ring dynamics. The full-length protein's involvement in cytokinesis and neurodevelopment underscores its importance in cell division and tissue patterning pathways.