Recombinant CDK20 protein (His tag)

Catalog Number	540716
Synonyms	CDK-activating kinase p42; CAK-kinase p42; Cell cycle-related kinase; Cell division protein kinase 20; Cyclin-dependent protein kinase H; Cyclin-kinase-activating kinase p42
Species	Human
Expression System	E. coli
Accession	Q8IZL9
Molecular Weight	Predictes a molecular mass of 35.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-303
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-303 aa (Q8IZL9) 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 CDK20 protein fragment (Cyclin-dependent kinase 20), encompassing amino acids 1-303, is a high-purity tool designed for studying the protein kinase domain. This fragment is ideal for investigating CDK20's roles in cell cycle regulation, SHH signaling pathways, and primary cilium function in developmental and cancer research. Cyclin-dependent kinase 20 (CDK20) is a crucial regulatory enzyme involved in cell cycle progression and developmental signaling. It activates CDK2 through phosphorylation at Thr-160, thereby influencing cell growth. CDK20, in coordination with TBC1D32, is essential for primary cilium structure and function, enabling proper GLI2 activation in response to Sonic Hedgehog (SHH) signaling during neural tube development. The protein localizes to the nucleus, cytoplasm, and cell projections such as cilia, highlighting its diverse roles in cellular processes. This recombinant fragment specifically contains the functional protein kinase domain (residues 4-288), making it valuable for targeted mechanistic studies.