Recombinant AURKA protein (His tag)

Catalog Number	544063
Synonyms	Aurora 2; Aurora/IPL1-related kinase 1; ARK-1; Aurora-related kinase 1; Breast tumor-amplified kinase; Ipl1- and aurora-related kinase 1; Serine/threonine-protein kinase 15; Serine/threonine-protein kinase 6; Serine/threonine-protein kinase Ayk1; Serine/threonine-protein kinase aurora-A
Species	Human
Expression System	E. coli
Accession	O14965
Molecular Weight	Predictes a molecular mass of 33.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	126-403
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 126-403 aa (O14965) 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	This recombinant protein is a fragment of human Aurora kinase A (AURKA), encompassing amino acids 126–403. It includes the complete protein kinase domain (133–383), making it an ideal tool for investigating the kinase's catalytic activity, substrate interactions, and role in cell cycle regulation and mitotic processes. Aurora kinase A is a mitotic serine/threonine kinase essential for cell cycle progression, with critical functions in centrosome maturation, spindle assembly, chromosomal alignment, and cytokinesis. It localizes to the centrosome and spindle microtubules during mitosis, phosphorylating key targets such as PLK1, TPX2, and p53 to regulate mitotic events and checkpoint signaling. Additionally, Aurora kinase A is involved in microtubule dynamics, axon formation, and cilia disassembly, highlighting its broad significance in cellular division and structural organization.