

Bioactive

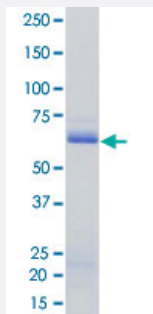
Full-Length

AURKB/INCENP (Human) Recombinant Protein

Catalog # P5781

Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description

Human AURKB (Q96GD4, 1 a.a. - 344 a.a.) full length recombinant protein with GST tag co-expressed with His-tagged INCENP (AAU04398.1, 803 a.a. - 918 a.a.) full length recombinant protein in Baculovirus infected Sf21 cells.

Theoretical MW (kDa)

66

Form

Liquid

Preparation Method

Baculovirus infected insect cell (Sf21) expression system

Purification

Glutathione sepharose chromatography

Purity

86 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : Kemptide. ATP: 100 µM.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — INCENP

Entrez GeneID	3619
Protein Accession#	Q96GD4
Gene Name	INCENP
Gene Alias	FLJ31633, MGC111393
Gene Description	inner centromere protein antigens 135/155kDa
Omim ID	604411
Gene Ontology	Hyperlink

Gene Summary

In mammalian cells, 2 broad groups of centromere-interacting proteins have been described: constitutively binding centromere proteins and 'passenger,' or transiently interacting, proteins (reviewed by Choo, 1997). The constitutive proteins include CENPA (centromere protein A; MIM 117139), CENPB (MIM 117140), CENPC1 (MIM 117141), and CENPD (MIM 117142). The term 'passenger proteins' encompasses a broad collection of proteins that localize to the centromere during specific stages of the cell cycle (Earnshaw and Mackay, 1994 [PubMed 8088460]). These include CENPE (MIM 117143); MCAK (MIM 604538); KID (MIM 603213); cytoplasmic dynein (e.g., MIM 600112); CliPs (e.g., MIM 179838); and CENPF/mitosin (MIM 600236). The inner centromere proteins (INCENPs) (Earnshaw and Cooke, 1991 [PubMed 1860899]), the initial members of the passenger protein group, display a broad localization along chromosomes in the early stages of mitosis but gradually become concentrated at centromeres as the cell cycle progresses into mid-metaphase. During telophase, the proteins are located within the midbody in the intercellular bridge, where they are discarded after cytokinesis (Cutts et al., 1999 [PubMed 10369859]).[supplied by OMIM]

Other Designations

binds and activates aurora-B and -C in vivo and in vitro|chromosomal passenger protein|inner centromere protein INCENP|inner centromere protein antigens (135kD, 155kD)

Gene Info — AURKB

Entrez GeneID

[9212](#)

Protein Accession#

[Q96GD4](#)

Gene Name

AURKB

Gene Alias

AIK2, AIM-1, AIM1, ARK2, AurB, IPL1, STK12, STK5

Gene Description

aurora kinase B

Omim ID

[604970](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

Chromosomal segregation during mitosis as well as meiosis is regulated by kinases and phosphatases. The Aurora kinases associate with microtubules during chromosome movement and segregation. Aurora kinase B localizes to microtubules near kinetochores, specifically to the specialized microtubules called K-fibers, and Aurora kinase A (MIM 603072) localizes to centrosomes (Lampson et al., 2004 [PubMed 14767480]).[supplied by OMIM]

Other Designations

aurora-1|aurora-B|serine/threonine kinase 12

Disease

- [Brain Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Glioblastoma](#)