

# Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

## AURA Protein, Human (Sf9)

Cat. No.:	HY-P701706
Synonyms:	AURKA; Aurora kinase A; Aurora 2; Aurora/IPL1-related kinase 1; ARK-1; Aurora-related kinase 1; hARK1; Breast tumor-amplified kinase; Serine/threonine-protein kinase 15; Serine/threonine-protein kinase aurora-A
Species:	Human
Source:	Sf9 insect cells
Accession:	O14965 (D2-S403)
Gene ID:	6790
Molecular Weight:	

PROPERTIES	
TROI ERIES	
Appearance	Solution.
Formulation	Supplied as a 0.22 $\mu m$ filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

### DESCRIPTION

# BackgroundAURA, a mitotic serine/threonine kinase, intricately regulates cell cycle progression and contributes significantly to various<br/>mitotic events. During mitosis, AURA associates with the centrosome and spindle microtubules, playing a critical role in<br/>spindle establishment, centrosome duplication, separation, chromosomal alignment, spindle assembly checkpoint<br/>activation, and cytokinesis. Essential for proper spindle positioning and the localization of NUMA1 and DCTN1 to the cell<br/>cortex during metaphase, AURA is also required for the initial activation of CDK1 at centrosomes. Functionally versatile,<br/>AURA phosphorylates a myriad of target proteins involved in diverse cellular processes, including microtubule dynamics,<br/>axon formation, and neurite extension. Moreover, AURA acts as a pivotal regulator of the p53/TP53 pathway,<br/>phosphorylating and destabilizing p53/TP53, and influences cilia dynamics by inhibiting cilia outgrowth and promoting cilia<br/>disassembly. Additionally, AURA plays a role in modulating the protein levels of the anti-apoptosis factor BIRC5 through the<br/>phosphorylation of the transcription factor FOXP1, highlighting its multifaceted impact on cellular processes.

### Caution: Product has not been fully validated for medical applications. For research use only.

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