

Recombinant Human Aurora Kinase A, His-tagged

Cat. No. AURKA-549H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human AURORA A was expressed by <i>baculovirus in Sf9 cell</i> using an N-terminal His tag. MW = 50kDa.
Species	Human
Source	Sf9 Cells
Description	AURORA A belongs to a multigenic family of mitotic serine/threonine kinases which are involved in the control of chromosome segregation. AURORA A is involved in centrosome separation, duplication and maturation as well as in bipolar spindle assembly and stability. AURORA A is expressed and active at the highest level during G2-M phase of the cell cycle. Overexpression of AURORA A has been found to be correlated with the grade of various human solid tumours. Ectopic AURORA A overexpression in any culture cell line leads to polyploidy and centrosome amplification.
Purity	>90% by SDS-PAGE.
Specific Activity	120 U/ug. One unit is defined as the amount of enzyme that will phosphorylate 1 pmol of Ser/Thr 1 peptide substrate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl ₂ , 3 mM MnCl ₂ , 1 mM DTT, 3 uM Naorthovanadate, 0.5 mM ATP, 4 uM aurora A substrate, and 0.4 ug/ml Aurora A kinase.
Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

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Formulated In	25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, 3 mM DTT.
Stability	>6 months at –80°C.
GENE INFORMATION	
Gene Name	AURKA aurora kinase A [Homo sapiens]
Synonyms	AURKA ; aurora kinase A; AIK; ARK1; AURA; BTAK; STK6; STK7; STK15; AURORA2; MGC34538; OTTHUMP00000031344; OTTHUMP00000166071; IPL1-related kinase; aurora-related kinase 1; aurora/IPL1-like kinase; serine/threonine kinase 6; breast-tumor-amplified kinase; serine/threonine protein kinase 15; EC 2.7.11.1; AurA; Aurora kinase A; Aurora-A; Serine/threonine kinase 15; hARK1; Breast tumor-amplified kinase; OTTHUMP00000031340; OTTHUMP00000031342; OTTHUMP00000031343; OTTHUMP00000031345; Breast tumor-amplified kinase 3; serine/threonine protein kinase 6
Gene ID	6790
mRNA Refseq	NM_003600
Protein Refseq	NP_003591
MIM	603072
UniProt ID	O14965
Chromosome Location	20q13
Pathway	Cell Cycle, Mitotic

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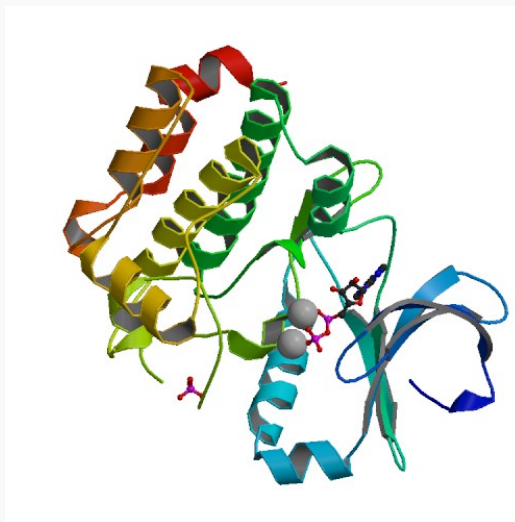
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Function

ATP binding; nucleotide binding; protein binding; protein binding; protein serine/threonine kinase activity; transferase activity; ubiquitin protein ligase binding

PDB rendering based on 1mq4.



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