

Recombinant Human AURKA Protein (D2-S403), Tag Free

Cat. No. AURKA-0694H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GG-AURA(D2-S403 end) Protein was expressed in Insect cell.
Species	Human
Source	Insect Cells
ProteinLength	D2-S403
Description	Mitotic serine/threonine kinase that contributes to the regulation of cell cycle progression. Associates with the centrosome and the spindle microtubules during mitosis and plays a critical role in various mitotic events including the establishment of mitotic spindle, centrosome duplication, centrosome separation as well as maturation, chromosomal alignment, spindle assembly checkpoint, and cytokinesis. Required for normal spindle positioning during mitosis and for the localization of NUMA1 and DCTN1 to the cell cortex during metaphase. Required for initial activation of CDK1 at centrosomes. Phosphorylates numerous target proteins, including ARHGEF2, BORA, BRCA1, CDC25B, DLGP5, HDAC6, KIF2A, LATS2, NDEL1, PARD3, PPP1R2, PLK1, RASSF1, TACC3, p53/TP53 and TPX2. Regulates KIF2A tubulin depolymerase activity. Important for microtubule formation and/or stabilization. Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Also acts as a key regulatory component of the p53/TP53 pathway, and particularly the checkpoint-response pathways critical for oncogenic transformation of cells, by phosphorylating and destabilizing p53/TP53. Phosphorylates its own inhibitors, the protein phosphatase type 1 (PP1) isoforms, to inhibit their activity. Necessary for

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proper cilia disassembly prior to mitosis. Regulates protein levels of the anti-apoptosis protein BIRC5 by suppressing the expression of the SCF(FBXL7) E3 ubiquitin-protein ligase substrate adapter FBXL7 through the phosphorylation of the transcription factor FOXP1.

Form	Liquid
Endotoxin	< 0.01 EU per µg of the protein
Purity	90%
Stability	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Storage Buffer	Supplied as sterile 50 mM Tris-HCl (pH7.5), 200 mM NaCl, 20% glycerol
Shipping	It is shipped out with blue ice.

GENE INFORMATION

Gene Name	AURKA aurora kinase A [Homo sapiens (human)]
Official Symbol	AURKA
Synonyms	AURKA; aurora kinase A; serine/threonine kinase 6, serine/threonine kinase 15, STK6, STK15; ARK1; AurA; BTAK; PPP1R47; protein phosphatase 1; regulatory subunit 47; STK7; ARK-1; hARK1; aurora 2; IPL1-related kinase; aurora-related kinase 1; aurora/IPL1-like kinase; serine/threonine kinase 6; aurora/IPL1-related

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kinase 1; breast tumor-amplified kinase; breast-tumor-amplified kinase;
 serine/threonine-protein kinase 6; serine/threonine protein kinase 15;
 serine/threonine-protein kinase 15; serine/threonine-protein kinase aurora-A; protein
 phosphatase 1, regulatory subunit 47; AIK; AURA; STK6; STK15; AURORA2;
 MGC34538;

Gene ID	6790
mRNA Refseq	NM_003600
Protein Refseq	NP_003591
MIM	603072
UniProt ID	O14965

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