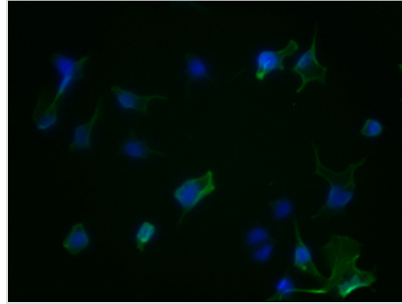




AURKA Antibody

| | |
|----------------------------|--|
| Product Code | CSB-RA223479A0HU |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | O14965 |
| Immunogen | A synthesized peptide derived from human Aurora A |
| Species Reactivity | Human |
| Tested Applications | ELISA, IF; Recommended dilution: IF:1:20-1:200 |
| Relevance | <p>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 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. Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Important for microtubule formation and/or stabilization. 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 stabilizing p53/TP53. Phosphorylates its own inhibitors, the protein phosphatase type 1 (PP1) isoforms, to inhibit their activity. Necessary for proper cilia disassembly prior to mitosis.</p> |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Product Type | Recombinant Antibody |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Epigenetics and Nuclear Signaling; Cancer; Cell biology; Signal transduction |
| Gene Names | AURKA |
| Accession NO. | 1H8 |
| Image | |



Immunofluorescence staining of HeLa Cells with CSB-RA223479A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The recombinant AURKA antibody is a monoclonal antibody molecule expressed by using recombinant DNA and protein engineering technology to clone the genes encoding the AURKA antibody into a plasma vector and then by transfecting the vector clone into the appropriate recipient mammalian cells for production. It was purified using affinity-chromatography. And it shows reactivity with AURKA protein from Human. This recombinant AURKA antibody can be used in the ELISA, IF.

AURKA is a G2/M phase serine/threonine kinase that primarily accumulates at centrosomes during late G2 phase anaphase and is responsible for centrosome separation and bipolar spindle assembly & stabilization. AURKA regulates cell cycle checkpoint and maintenance of genomic integrity. AURKA is upregulated in numerous human cancers, including breast, gastric, and bladder cancers. High expression of AURKA induces chromosomal instability thus correlating to proliferation, metastasis, epithelial-mesenchymal transition (EMT), and drug resistance of cancer cells.