

Aurora Antibody Sampler Kit

Catalog No.	E-AB-K1235	Reactivity	Human
Storage	Store at -20°C, Avoid freeze / thaw cycles	Applications	WB
Buffer	PBS with sodium azide and glycerol.	Dilution	1:500-1:2000

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Included	Product	Isotype	Mol. Wt.	Size
E-AB-30557		IgG	45kDa	20µL
E-AB-21170		IgG	45kDa	20µL
E-AB-30559		IgG	39kDa	20µL
E-AB-16191		IgG	36kDa	20µL
E-AB-1003	Goat Anti-Rabbit IgG(H+L)(peroxidase/HRP conjugated)	Goat		120µL

Product Description

The Aurora Antibody Sampler Kit provides an economical means to investigate the G2/M phase of the cell cycle. The kit contains enough primary and secondary antibodies to perform two western blots with each antibody.

Please visit www.elabscience.com for validation data and a complete listing of recommended companion products.

Background

Aurora kinases belong to a highly conserved family of mitotic serine/threonine kinases with three members identified among mammals: Aurora A, B, and C. Studies on the temporal expression pattern and subcellular localization of Aurora kinases in mitotic cells suggest an association with mitotic structure. Aurora kinase functional influences span from G2 phase to cytokinesis and may be involved in key cell cycle events such as centrosome duplication, chromosome bi-orientation and segregation, cleavage furrow positioning, and ingression. Aurora A is detected at the centrosomes, along mitotic spindle microtubules, and in the cytoplasm of mitotically proliferating cells. Aurora A protein levels are low during G1 and S phases and peak during the G2/M phase of the cell cycle. Phosphorylation of Aurora A at Thr288 in its catalytic domain increases kinase activity. Aurora A is involved in centrosome separation, maturation, and spindle assembly and stability. Expression of Aurora B protein also peaks during the G2/M phase of the cell cycle; Aurora B kinase activity peaks at the transition from metaphase to the end of mitosis. Aurora B associates with chromosomes during prophase prior to relocating to the spindle at anaphase. Aurora B regulates chromosome segregation through the control of microtubule-kinetochore attachment and cytokinesis. Expression of both Aurora A and Aurora B during the G2/M phase transition is tightly coordinated with histone H3 phosphorylation; research investigators have observed overexpression of these kinases in a variety of human cancers. Aurora C localizes to the centrosome from anaphase to cytokinesis and both mRNA and protein levels peak during G2/M phase. Although typical Aurora C expression is limited to the testis, research studies report overexpression of Aurora C is detected in various cancer cell lines.