

Aurora A/B Substrate Antibody Sampler Kit

Cat# AK0121

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

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 relocalizing 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. Transforming acid coiled-coil (TACC) proteins are a family of proteins characterized by a common coiled-coil motif of approximately 200 amino acids at the carboxy-terminal end. When pho

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340235	Phospho-Histone H3 (Ser10) Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340236	Phospho-Histone H3 (Ser28) Polyclonal Antibody	20µL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340266	Phospho-P53 (Ser315) Polyclonal Antibody	20µL	WB, IHC, IP, ELISA	Human	Rabbit

A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat
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PRODUCT USE LIMITATION

These products are intended for research use only.