Phospho-Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198) (CC12) rabbit mAb FITC conjugate

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#2388

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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	Isotype
Flow Cytometry	N/A	Monoclonal	Rabbit IgGk

Format: FITC

Cross Reactivity: Predicted to work with mouse, rat and other homologues.

Formulation: 1X PBS, 0.09% NaN3, 0.2% BSA

Preparation: Protein A+G

Reactivity: Human

Recommended Usage: For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.

Immunogen: A synthetic phospho-peptide corresponding to residues surrounding human Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198)

Description: Aurora kinases (serine/threonine kinases) are essential requirement for the onset and progression of mitosis. These kinases share a similar protein structure as well as kinase activity, however each kinase display distinct cellular and subcellular localization. Each Aurora member is phosphorylated at specific residues upon co-factor binding during mitosis. Aurora kinases acquire active kinase conformations due to the activation loop. The active kinase conformation is acquired upon auto-phosphorylation through an intermolecular (trans)-reaction within Aurora kinase domain. Aurora Kinase A (Aurora A) is involved in G2/M transition. AuroraA promotes centrosome maturation and mitotic spindle assembly, whereas AuroraB and AuroraC act as chromosome-passenger complex proteins. They play a crucial role in chromosomal binding to kinetochores and segregation of chromosomes. Aurora B is widely distributed in the cell, while AuroraC is expressed mainly in the meiotically-active germ cells. Aurora kinases are auto-phosphorylated into active forms at conserved threonine residues (i.e. the Thr288 (AurA), Thr232 (AurB) and Thr195 (AurC) residues). AuroraA auto-phosphorylation is initiated by several co-factors acting at different steps of mitosis. AroraB and AruroaC auto-phosphorylation are mediated by survivin and Borealin proteins.

References:

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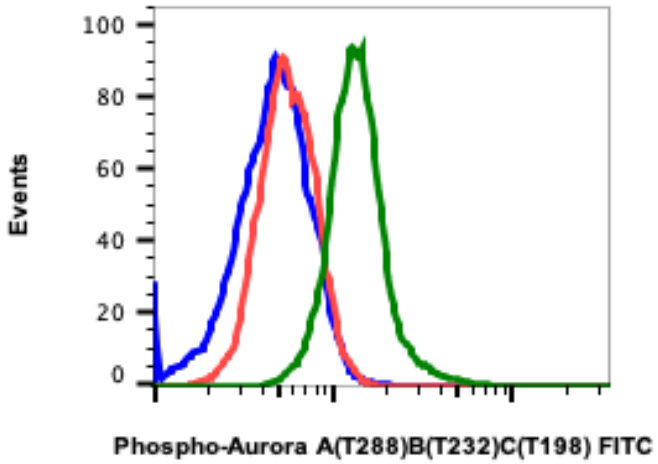

Flow cytometric analysis of HeLa cells untreated and unstained as negative control (blue) or untreated (red) or treated with nocodazole (green) and stained using Phospho-Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198) antibody FITC conjugate, AuroraABC-CC12. Cat. #2388.

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