

12-4303: Phospho-Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198) (Clone: CC12) rabbit mAb

Clonality :	Monoclonal
Clone Name :	AuroraABC-CC12
Application :	FACS
Reactivity :	Human
Conjugate :	Unconjugated
Format :	Purified
Alternative Name :	Aurora kinase A/B/C, AURKA, AURKB, AURKC
Isotype :	Rabbit IgG1k
Immunogen Information :	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.

Product Info

Amount :	20 μ l / 200 μ l
Content :	1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA
Storage condition :	Store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

1 μ g/mL - 0.001 μ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

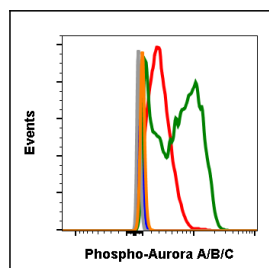


Fig-1: Flow cytometric analysis of HeLa cells secondary antibody only negative control (blue) or untreated (grey) or treated with nocodazole (orange) using 0.5 μ g/mL of isotype control or untreated (red) or treated (green) using Phospho-Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198) antibody AuroraABC-CC12 at 0.5 μ g/mL.

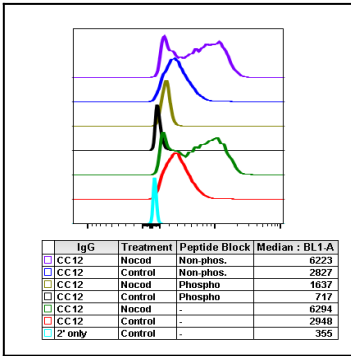


Fig 2 : Peptide blocking flow cytometric analysis of HeLa cells unstained cells negative control (light blue) or untreated (red) or treated with nocodazole (green) or untreated and blocked with phospho-peptide (black) or nocodazole and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or nocodazole and blocked with non-phospho peptide (purple) using Phospho-Aurora A (Thr288)/Aurora B (Thr232)/Aurora C (Thr198) antibody AuroraABC-CC12 at 0.5 µg/mL.