

Aurora A Antibody (R30880)

Catalog No.	Formulation	Size
R30880	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P97477
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Aurora A antibody is available for research use only.



Western blot testing of Aurora A antibody at and mouse ovary lysate. Expected molecular weight: ~46kDa.

Description

Aurora kinase A, also called ARK1, AURKA, AIK , AURORA2 ,BTAK, PPP1R47, STK7, STK15, and STK6, is a mitotic centrosomal protein kinase. The main role of AURKA in tumor development is in controlling chromosome segregation during mitosis. Aurora A is a member of a family of mitotic serine/threonine kinases. Cell cycle and Northern blot analyses showed that peak expression of the protein occurs during the G2/M phase and then decreases. By fluorescence in situ hybridization, the gene is represented by 2 signals in chromosome bands 20q13.2-q13.3 and 1q41-q42. It is overexpressed in many human cancers. Ectopic overexpression of Aurora A in mammalian cells induces centrosome amplification, chromosome instability, and oncogenic transformation, a phenotype characteristic of loss-of-function

mutations of p53. Depletion of Ajuba prevented activation of AURKA at centrosomes in late G2 phase and inhibited mitotic entry. Activation of the kinase was independently sufficient to induce rapid ciliary resorption, and AURKA acted in this process through phosphorylation of HDAC6, leading to HDAC6-dependent tubulin deacetylation and destabilization of the ciliary axoneme.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Aurora A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of mouse AURKA (QKTEDTKKRQWTLEDFD) was used as the immunogen for this Aurora A antibody.

Storage

After reconstitution, the Aurora A antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.