



Rabbit Anti-Phospho-Aurora B (Tyr12) antibody

SL12552R

Product Name:	Phospho-Aurora B (Tyr12)
Chinese Name:	磷酸化有丝分裂激酶B抗体
Alias:	Aurora B (phospho Y12); AURKB_HUMAN; Aurora B (phospho T12); AIK2; AIM1; ARK2; AurB; AURKB; Aurora 1; Aurora and Ipl1 like midbody associated protein 1; Aurora kinase B; Aurora related kinase 2; Aurora-B; Aurora/IPL1 related kinase 2; IPL1; Serine/threonine kinase 12; Serine/threonine protein kinase 12; STK1; STK12; STK5.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Aurora B around the phosphorylation site of Tyr12:WP(p-Y)GR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Mahogany (MG), originally identified as a protein involved in pigmentation, acts in

conjunction with melanocortin receptors to suppress diet-induced obesity. Mahogany contains a single transmembrane domain, and it is expressed in a broad range of tissues, including the hypothalamus and pigment cells. Mutations within the mahogany gene were shown to rescue agouti-lethal-yellow mutant mice from obesity. The extracellular domain of mouse mahogany is the ortholog of the human protein attractin. Attractin (also designated DPPT-L) is a human serum glycoprotein and is a member of the CUB family of cell adhesion and guidance proteins. Attractin is expressed on activated T cells and is released from the cells 48 to 72 hours after activation.

Function:

May be directly involved in regulating the cleavage of polar spindle microtubules and is a key regulator for the onset of cytokinesis during mitosis. Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. Phosphorylates 'Ser-10' and 'Ser-28' of histone H3 during mitosis. Required for kinetochore localization of BUB1 and SGOL1. Interacts with INCENP.

Subcellular Location:

Nucleus. Chromosome. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalized with gamma tubulin in the mid-body.

Tissue Specificity:

High level expression seen in the thymus. It is also expressed in the spleen, lung, testis, colon, placenta and fetal liver. Expressed during S and G2/M phase and expression is up-regulated in cancer cells during M phase.

Post-translational modifications:

Ubiquitinated by different BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complexes. Ubiquitinated by the BCR(KLHL9-KLHL13) E3 ubiquitin ligase complex, ubiquitination leads to removal from mitotic chromosomes and is required for cytokinesis. During anaphase, the BCR(KLHL21) E3 ubiquitin ligase complex recruits the CPC complex from chromosomes to the spindle midzone and mediates the ubiquitination of AURKB. Ubiquitination of AURKB by BCR(KLHL21) E3 ubiquitin ligase complex may not lead to its degradation by the proteasome.

DISEASE:

Note=Disruptive regulation of expression is a possible mechanism of the perturbation of chromosomal integrity in cancer cells through its dominant-negative effect on cytokinesis.

Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora

subfamily.
Contains 1 protein kinase domain.

SWISS:
Q96GD4

Gene ID:
9212

Database links:

[Entrez Gene: 9212](#)Human

[Entrez Gene: 20877](#)Mouse

[Entrez Gene: 114592](#)Rat

[Omim: 604970](#)Human

[SwissProt: Q96GD4](#)Human

[SwissProt: O70126](#)Mouse

[SwissProt: O55099](#)Rat

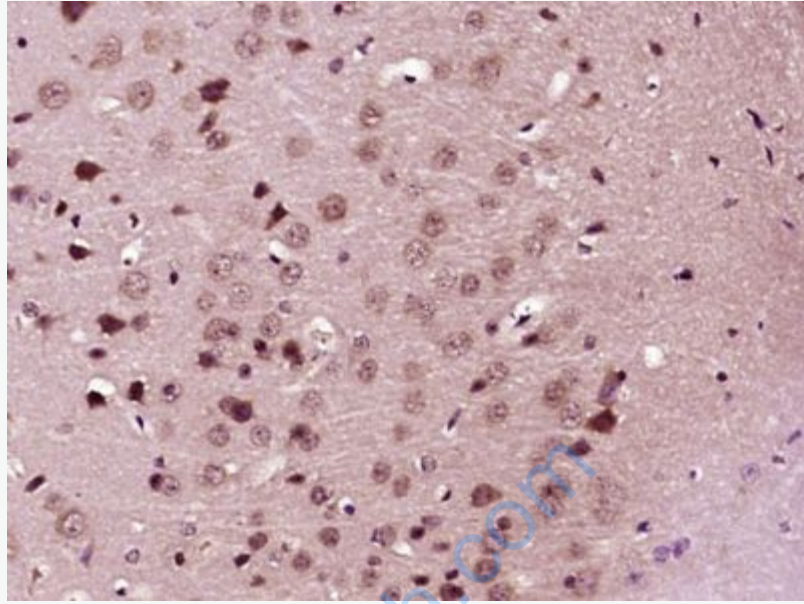
[Unigene: 442658](#)Human

[Unigene: 3488](#)Mouse

[Unigene: 10865](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Aurora B (Tyr12)) Polyclonal Antibody, Unconjugated (SL12552R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.