

ARK-2/3 (phospho Thr236/202) Polyclonal Antibody

Catalog No: YP1015

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: AurB/C

Gene Name: AURKB/AURKC

Protein Name: Serine/threonine-protein kinase 12/Aurora kinase C

Q96GD4/Q9UQB9

Human Gene Id: 9212/6795

Human Swiss Prot

No:

Mouse Gene ld: 20877

Rat Gene Id: 114592

Rat Swiss Prot No: 055099

Immunogen: The antiserum was produced against synthesized peptide derived from human

AurB/C around the phosphorylation site of Thr236/202. AA range:201-250

Specificity: Phospho-ARK-2/3 (T236/202) Polyclonal Antibody detects endogenous levels of

ARK-2/3 protein only when phosphorylated at T236/202.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:**

Molecularweight: 35-40kD

Background:

This gene encodes a member of the aurora kinase subfamily of serine/threonine kinases. The genes encoding the other two members of this subfamily are located on chromosomes 19 and 20. These kinases participate in the regulation of alignment and segregation of chromosomes during mitosis and meiosis through association with microtubules. A pseudogene of this gene is located on chromosome 8. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2015],

Function:

catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,disease:Disruptive regulation of expression is a possibile mechanism of the perturbation of chromosomal integrity in cancer cells through its dominant-negative effect on cytokinesis., 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., similarity: Belongs to the protein kinase superfamily. Ser/Thr protein

kinase family. Aurora subfamily.,s

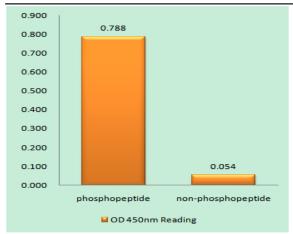
Subcellular Location:

Nucleus. Chromosome, centromere, centromere, centromere, kinetochore . Cytoplasm, cytoskeleton, spindle . Midbody . Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis (PubMed:20929775). Colocalized with gamma tubulin in the midbody (PubMed:17726514). Proper localization of the active, Thr-232-phosphorylated form during metaphase may be dependent upon interaction with SPDYC (PubMed:20605920). Colocalized with SIRT2 during cytokinesis with the midbody (PubMed:17726514). Localization (and probably targeting of the CPC) to the inner centromere occurs predominantly in regions with overlapping mitosisspecific histone phosphorylations H3pT3 and H2ApT12 (PubMed

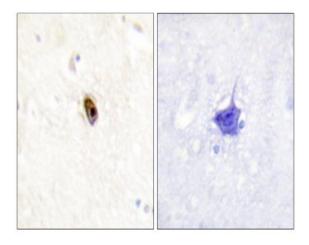
Expression:

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. ; [Isoform 3]: Not expressed in normal liver, high expression in metastatic liver.

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AurB/C (Phospho-Thr236/202) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using AurB/C (Phospho-Thr236/202) Antibody. The picture on the right is blocked with the phospho peptide.