abcam

Product datasheet

Recombinant Human Aurora A protein ab86846

1 Image

Description

Product name Recombinant Human Aurora A protein

Purity > 95 % SDS-PAGE.

ab86846 is purified using conventional chromatography techniques.

Expression system Escherichia coli

Protein length Full length protein

Animal free No.

Nature Recombinant

Species Human

Sequence MGSSHHHHHH SSGLVPRGSH MDRSKENCIS

GPVKATAPVG GPKRVLVTQQ FPCQNPLPVN SGQAQRVLCP SNSSQRIPLQ AQKLVSSHKP VQNQKQKQLQ ATSVPHPVSR PLNNTQKSKQ PLPSAPENNP EEELASKQKN EESKKRQWAL

EDFEIGRPLG KGKFGNVYLA REKQSKFILA LKVLFKAQLE KAGVEHQLRR EVEIQSHLRH PNILRLYGYF HDATRVYLIL EYAPLGTVYR ELQKLSKFDE QRTATYITEL ANALSYCHSK RVIHRDIKPE NLLLGSAGEL KIADFGWSVH APSSRRTTLC

GTLDYLPPEM IEGRMHDEKV DLWSLGVLCY

EFLVGKPPFE ANTYQETYKR ISRVEFTFPD FVTEGARDLI

SRLLKHNPSQ RPMLREVLEH PWITANSSKP

SNCQNKESAS KQS

Specifications

Our Abpromise guarantee covers the use of ab86846 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

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Constituents: 0.0038% EGTA, 0.0077% DTT, 0.316% Tris HCI, 0.00292% EDTA, 0.58% Sodium chloride

General Info

Function Contributes to the regulation of cell cycle progression. Required for normal mitosis. Associates

with the centrosome and the spindle microtubules during mitosis and functions in centrosome maturation, spindle assembly, maintenance of spindle bipolarity, centrosome separation and mitotic checkpoint control. Phosphorylates numerous target proteins, including ARHGEF2, BRCA1, KIF2A, NDEL1, PARD3, PLK1 and BORA. Regulates KIF2A tubulin depolymerase activity (By similarity). Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Important for microtubule formation and/or stabilization.

Tissue specificity

Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.

Sequence similarities

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

Contains 1 protein kinase domain.

Post-translational modifications

Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the activation segment. Phosphorylation at Thr-288 varies during the cell cycle and is highest during

M phase. Autophosphorylated at Thr-288 upon TPX2 binding. Phosphorylated upon DNA

damage, probably by ATM or ATR.

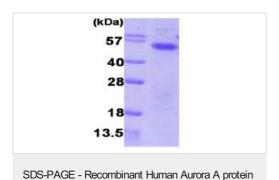
Ubiquitinated by CHFR, leading to its degradation by the proteasome (By similarity). Ubiquitinated by the anaphase-promoting complex (APC), leading to its degradation by the proteasome.

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Cellular localization

Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle pole. Detected at the neurite hillock in developing neurons (By similarity). Localizes on centrosomes in interphase cells and at each spindle pole in mitosis.

Images



15% SDS-PAGE showing ab86846 at approximately 47.9kDa ($3\mu g$).

(ab86846)

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