

AURKB recombinant antibody

AURKB Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA243856	Rabbit	Human	Immunoprecipitation, Immunohistochemistry, Western Blot, ELISA

PRODUCT SYNONYMS

AURKB; Monoclonal Recombinant Antibody; AURKB Antibody; Aurora kinase B (EC 2.7.11.1) (Aurora 1) (Aurora- and IPL1-like midbody-associated protein 1) (AIM-1) (Aurora/IPL1-related kinase 2) (ARK-2) (Aurora-related kinase 2) (STK-1) (Serine/threonine-protein kinase 12) (Serine/threonine-protein kinase 5) (Serine/threonine-protein kinase aurora-B); AIK2 AIM1 AIRK2 ARK2 STK1 STK12 STK5; AURKB recombinant antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	4E5
Purity/Purification	Affinity-chromatography
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, PH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Applicable Applications for AURKB recombinant antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Antibody Type	Recombinant Antibody
Conjugation	Non-conjugated
Immunogen	A synthesized peptide derived from human Aurora B
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IP (Immunoprecipitation)

Immunoprecipitating AURKB in Hela whole cell lysate Lane 1: Rabbit control IgG instead of in Hela whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: Hela whole cell lysate?500ug? Lane 3: Hela whole cell lysate (10ug)



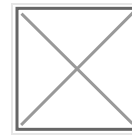
IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human cervical cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



WB (Western Blot)

Western BlotPositive WB detected in: Hela whole cell lysate, Jurkat whole cell lysate, 293 whole cell lysate, MCF-7 whole cell lysate, U251 whole cell lysate, A549 whole cell lysate, HepG2 whole cell lysateAll lanes: AURKB antibody at 1:2000SecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 40, 36, 17, 35 kDaObserved band size: 40 kDa

ADDITIONAL INFORMATION

Related Product Information for AURKB recombinant antibody

Serine/threonine-protein kinase 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. Involved in the bipolar attachment of spindle microtubules to kinetochores and is a key regulator for the onset of cytokinesis during mitosis. Required for central/midzone spindle assembly and cleavage furrow formation. Key component of the cytokinesis checkpoint, a process required to delay abscission to prevent both premature resolution of intercellular chromosome bridges and accumulation of DNA damage: phosphorylates CHMP4C, leading to retain abscission-competent VPS4 (VPS4A and/or VPS4B) at the midbody ring until abscission checkpoint signaling is terminated at late cytokinesis (PubMed:22422861, PubMed:24814515). AURKB phosphorylates the CPC complex subunits BIRC5/survivin, CDCA8/borealin and INCENP. Phosphorylation of INCENP leads to increased AURKB activity. Other known AURKB substrates involved in centromeric functions and mitosis are CENPA, DES/desmin, GPAF, KIF2C, NSUN2, RACGAP1, SEPT1, VIM/vimentin, GSG2/Haspin, and histone H3. A positive feedback loop involving GSG2 and AURKB contributes to localization of CPC to centromeres. Phosphorylation of VIM controls vimentin filament segregation in cytokinetic process, whereas histone H3 is phosphorylated at 'Ser-10' and 'Ser-28' during mitosis (H3S10ph and H3S28ph, respectively). A positive feedback between GSG2 and AURKB contributes to CPC localization. AURKB is also required for kinetochore localization of BUB1 and SGO1. Phosphorylation of p53/TP53 negatively regulates its transcriptional activity. Key regulator of active promoters in resting B- and T-lymphocytes: acts by mediating phosphorylation of H3S28ph at active promoters in resting B-cells, inhibiting RNF2/RING1B-mediated ubiquitination of histone H2A and enhancing binding and activity of the USP16 deubiquitinase at transcribed genes.

Product Categories/Family for AURKB recombinant antibody

[Epigenetics and Nuclear Signaling](#); [Cancer](#); [Cell biology](#); [Signal transduction](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	83776600
NCBI GeneID	9212
NCBI Accession #	NP_004208.2
NCBI GenBank Nucleotide #	NM_004217.3
UniProt Accession #	Q96GD4; O14630; O60446; O95083; Q96DV5; Q9UQ46; C7G533; C7G534; C7G535; D3DTR4
Molecular Weight	39,311 Da
NCBI Official Full Name	aurora kinase B isoform 1
NCBI Official Synonym Full Names	aurora kinase B
NCBI Official Symbol	AURKB
NCBI Official Synonym Symbols	AIK2; AIM1; ARK2; AurB; IPL1; STK5; AIM-1; STK12; PPP1R48; aurkb-sv1; aurkb-sv2
NCBI Protein Information	aurora kinase B; ARK-2; STK-1; aurora 1; aurora-1; aurora-B; aurora kinase B-Sv1; aurora kinase B-Sv2; aurora-related kinase 2; serine/threonine kinase 12; aurora/IPL1-related kinase 2; serine/threonine-protein kinase 5; serine/threonine-protein kinase 12
UniProt Protein Name	Aurora kinase B

UniProt Gene Name	AURKB
UniProt Synonym Gene Names	AIK2; AIM1; AIRK2; ARK2; STK1; STK12; STK5; AIM-1; ARK-2
UniProt Entry Name	AURKB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/aurkb-recombinant-antibody-clone-4e5-immunoprecipitation-immunohistochemistry-western-blot-elisa/243856>