

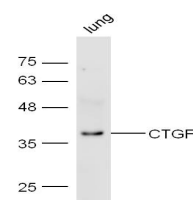
## Product Datasheet

### Aurora A+B+C Polyclonal Antibody GRP476

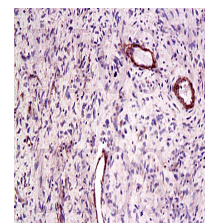
#### Description

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 SGOL1. Phosphorylation of p53/TP53 negatively regulates its transcriptional activity. Key regulator of active promoters in resting B- and T-lymphocytes.

<b>Species/Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse
<b>Conjugation</b>	Unconjugated
<b>Tested Applications</b>	IHC-P, WB
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human Aurora B (public_immunogen_range: 70-105/344)
<b>Form/Appearance</b>	Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.
<b>Concentration</b>	1ug/ul
<b>Storage</b>	Store at -20°C for 12 months.
<b>Note</b>	For research use only.
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Purified by Protein A.
<b>Entrez</b>	<b>9212</b>
<b>Dilution Range</b>	WB: 1:300-1000, IHC-P: 1:200-400



WB of GRP476



IHC-P of GRP476