

Rabbit CDCA8 Polyclonal Antibody | anti-CDCA8 antibody

CDCA8 Antibody

CATALOG # AAA325902	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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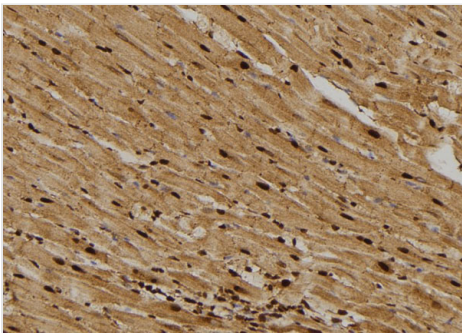
PRODUCT SYNONYMS

CDCA8; Polyclonal Antibody; CDCA8 Antibody; BOR; BOREA_HUMAN; Borealin; Cell division cycle associated 8; cell division cycle associated protein 8; Cell division cycle-associated protein 8; Dasra B; Dasra-B; DasraB; FLJ10468; FLJ12042; hDasra B; hDasra-B; MESRGP; OTTHUMP00000004514; pluripotent embryonic stem cell related gene 3 protein; Pluripotent embryonic stem cell-related gene 3 protein; anti-CDCA8 antibody

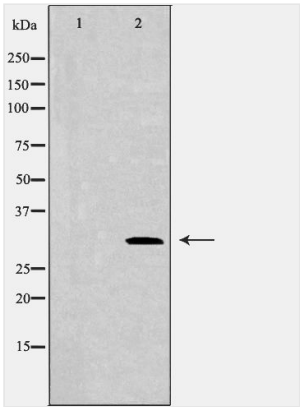
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CDCA8 antibody detects endogenous levels of total CDCA8
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	280
Applicable Applications for anti-CDCA8 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CDCA8
Subcellular Location	Nucleus > Nucleolus. Cytoplasm. Cytoplasm > Cytoskeleton > Spindle. Chromosome > Centromere. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalizes with SENP3 in the nucleolus in interphase cells.
Tissue Specificity	Cell-cycle regulated. Increases during G2/M phase and then reduces after exit from M phase.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (86%), Bovine (86%), Horse (100%), Sheep (86%), Rabbit (100%), Dog (86%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA325902 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of HEX293 lysate using CDCA8 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CDCA8 antibody

Description: Borealin is a 280-amino acid protein that stabilizes the bipolar mitotic spindle. Borealin is part of a complex called Aurora B kinase that has essential regulatory roles at centromeres and the central spindle in cells undergoing mitosis. This complex makes up the enzymatic core of the chromosomal passenger complex (CPC). It is possible that the Borealin subunit directs the CPC to centromeric DNA. Deletion of Borealin delays mitotic progression and causes kinetochore-spindle to mis-attach. Deletion also causes an increase in bipolar spindles associated with ectopic asters. These extra poles, which form after chromosomes acquire their bipolar orientation, seriously disrupt chromosome allotment during anaphase. It is true that inappropriate chromosomal segregation and cell division may cause auneuploidy leading to cancer, so an abnormal expression of Borealin may lead to gastric cancer.

Function: 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. Major effector of the TTK kinase in the control of attachment-error-correction and chromosome alignment.

Subunit Structure: May form homooligomers and homodimers. Component of the chromosomal passenger complex (CPC) composed of at least BIRC5/survivin, CDCA8/borealin, INCENP, AURKB or AURKC; in the complex forms a triple-helix bundle-based subcomplex with INCENP and BIRC5 (PubMed:17956729). Interacts with SENP3, UBE2I and RANBP2. Interacts (phosphorylated) with SGO1 and SGO2; the association is dependent on CDK1.

Post-translational Modifications: Phosphorylated by TTK, essentially at Thr-88, Thr94, Thr-169 and Thr-230. Phosphorylation (probably by CDK1) promotes targeting of the CPC to centromeric DNA. Sumoylated by UBE2I and RANBP2. Desumoylated by SENP3 through the removal of SUMO2 and SUMO3.

Similarity: The C-terminal region (aa 207-280) represents the dimerization motif. Belongs to the borealin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	379056369
NCBI GeneID	55143
NCBI Accession #	NP_001243804.1
NCBI GenBank Nucleotide #	NM_001256875.1
UniProt Accession #	Q53HL2; Q53HN1; Q96AM3; Q9NVW5; D3DPT4
Molecular Weight	Observed: 31 kDa Predicted: 32 kDa
NCBI Official Full Name	borealin
NCBI Official Synonym Full Names	cell division cycle associated 8
NCBI Official Symbol	CDCA8

NCBI Official Synonym Symbols	BOR; DasraB; MESRGP; BOREALIN
NCBI Protein Information	borealin
UniProt Protein Name	Borealin
UniProt Gene Name	CDCA8
UniProt Synonym Gene Names	PESCRG3; hDasra-B

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cdca8-antibody-immunohistochemistry-western-blot-elisa/325902>