

Product datasheet for TA336746

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CDCA8 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, WB

Recommended Dilution: Western Blot: 2 ug/ml, Immunocytochemistry/ Immunofluorescence: 1:50-1:200

Reactivity: Human

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide made to an internal portion of human Borealin (within residues 200-250).

[Swiss-Prot# Q53HL2]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 38 kDa

Gene Name: cell division cycle associated 8

Database Link: NP 060571

Entrez Gene 55143 Human

Q53HL2





Background:

Encoded by gene CDCA8, borealin forms an important component of mitosis regulating chromosomal passenger complex (CPC complex - BIRC5/survivin, CDCA8/borealin, INCENP, AURKB and AURKC) which is known for ensuring correct chromosome alignment/segregation and is required for chromatin-induced microtubule stabilization as well as spindle assembly. Borealin governs CPC to centromeric DNA and is a major effector of the TTK kinase in the control of attachment-error-correction and chromosome alignment. Besides associating with CPC complex subunits, borealin interact with SENP3, UBE2I and RANBP2 which are involved its sumoylation. Borealin is expressed in a cell cycle-dependent manner and the levels of endogenous borealin significantly increase during mitosis. TTK can phosphorylated borealin at Thr-88, Thr94, Thr-169 and Thr-230 and and mutation of S219 to alanine in borealin causes defects in mitotic progression advocating for the importance of phosphorylation in borealin function. Mutation of additional sites creates a form of borealin that is defective in localizing to the centromere, binding to Sgo1 and Sgo2, and in coordinating chromosome alignment.

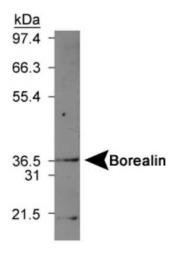
Synonyms: BOR; BOREALIN; DasraB; MESRGP

Note: This Borealin antibody is useful for Immunocytochemistry/Immunofluorescence and Western

blot, where a band can be seen ~38 kDa.

Protein Families: Druggable Genome

Product images:



Western Blot: Borealin Antibody TA336746 - Mouse kidney lysate.