

Product datasheet

Recombinant Human Borealin/CDCA8 protein  
ab107144

1 References 1 Image

Description

<b>Product name</b>	Recombinant Human Borealin/CDCA8 protein	
<b>Purity</b>	> 90 % SDS-PAGE. Purified by using conventional chromatography techniques.	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<a href="#">Q53HL2</a>	
<b>Protein length</b>	Protein fragment	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	MGSSHHHHHHSSGLVPRGSHMRKLASFLKDFDREVEIRIK QIESDRQNLL KEVDNLYNIEILRLPKALREMNWLDYFALGGNKQALEEAAT ADLDITEIN KLTAETAIQTPLKSAKTRKVIQVDEMIVEEEEEENERKNLQ TARVKRCPP SKKRTQSIQGGKGGKRSSRANTVTPAVGRLEVSMVKPTP GLTPRFDSRVF KTPGLRTPAAGERIYNISGNGSPLADSKEIFLTPVGGGES LRLASDLQ RHSIAQLDPEALGNIKKLSNRLAQICSSIRTHK	
<b>Predicted molecular weight</b>	32 kDa including tags	
<b>Amino acids</b>	19 to 280	
<b>Tags</b>	His tag N-Terminus	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab107144** in the following tested applications.

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

<b>Applications</b>	Mass Spectrometry SDS-PAGE
<b>Mass spectrometry</b>	MALDI-TOF

**Form** Liquid

## Preparation and Storage

### Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCl, 0.0292% EDTA, 50% Glycerol (glycerin, glycerine), 1.16% Sodium chloride

## General Info

### 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. In the complex, it may be required to direct the CPC to centromeric DNA. Major effector of the TTK kinase in the control of attachment-error-correction and chromosome alignment.

### Sequence similarities

Belongs to the borealin family.

### Developmental stage

Cell-cycle regulated. Increases during G2/M phase and then reduces after exit from M phase.

### Domain

The C-terminal region (aa 207-280) represents the dimerization motif.

### Post-translational modifications

Phosphorylated by TTK, essentially at Thr-88, Thr94, Thr-169 and Thr-230. Sumoylated by UBE2I and RANBP2. Desumoylated by SENP3 through the removal of SUMO2 and SUMO3.

### Cellular localization

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.

## Images



ab107144 at 3 µg analysed by 15% SDS PAGE.

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