

Anti-INCE antibody



Description Unconjugated Rabbit polyclonal to INCE

Model STJ190160

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Synthesized peptide derived from human INCE protein.

Immunogen Region 1-80aa

Gene ID <u>3619</u>

Gene Symbol <u>INCENP</u>

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity INCE Polyclonal Antibody detects endogenous levels of protein.

Purification INCE antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Inner centromere protein

Molecular Weight 100 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6058OMIM:604411</u>

Alternative Names Inner centromere protein

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. Acts as a scaffold regulating CPC localization and activity. The Cterminus associates with AURKB or AURKC, the N-terminus associated with BIRC5/survivin and CDCA8/borealin tethers the CPC to the inner centromere, and the microtubule binding activity within the central SAH domain directs AURKB/C toward substrates near microtubules . The flexibility of the SAH domain is proposed to allow AURKB/C to follow substrates on dynamic microtubules while ensuring CPC docking to static chromatin . Activates AURKB and AURKC . Required for localization of CBX5 to mitotic centromeres . Controls the kinetochore localization of BUB1

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Sequence and Domain Family

The IN box mediates interaction with AURKB and AURKC. The SAH (single alpha-helix) region is characterized by a high content of charged residues which are predicted to stabilize the alpha-helical structure by ionic bonds. It can refold after extension suggesting an in vivo force-dependent function. The isolated SAH domain is monomeric.

isolated SATI dolla.

Cellular Localization Nucleus Chromosome, centromere Cytoplasm, cytoskeleton, spindle Midbody

Chromosome, centromere, kinetochore. Colocalized at synaptonemal complex

central element from zygotene up to late pachytene when it begins to

relocalize to heterochromatic chromocenters. Colocalizes with AURKB at a

connecting strand traversing the centromere region and joining sister kinetochores, in metaphase II centromeres. This strand disappears at the metaphase II/anaphase II transition and relocalizes to the spindle midzone. Colocalizes with AURKB at mitotic chromosomes. Localizes to inner

prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Cocalizes to the equatorial cell

kinetochore. Localizes on chromosome arms and inner centromeres from

cortex at anaphase.

Post-translational Modifications Phosphorylation by AURKB or AURKC at its C-terminal part is important for

AURKB or AURKC activation by INCENP.