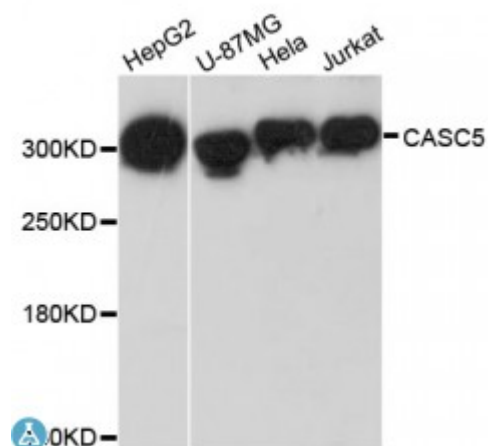


Anti-CASC5 Antibody



Description

The protein encoded by this gene is a component of the multiprotein assembly that is required for creation of kinetochore-microtubule attachments and chromosome segregation. The encoded protein functions as a scaffold for proteins that influence the spindle assembly checkpoint during the eukaryotic cell cycle and it interacts with at least five different kinetochore proteins and two checkpoint kinases. In adults, this gene is predominantly expressed in normal testes, various cancer cell lines and primary tumors from other tissues and is ubiquitously expressed in fetal tissues. This gene was originally identified as a fusion partner with the mixed-lineage leukemia (MLL) gene in t(11;15)(q23;q14). Mutations in this gene cause autosomal recessive primary microcephaly-4 (MCPH4). Alternative splicing results in multiple transcript variants encoding different isoforms. Additional splice variants have been described but their biological validity has not been confirmed.

Model	STJ115074
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human CASC5 (NP_733468.3).
Gene ID	57082
Gene Symbol	KNL1
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Highly expressed in testis, where it is localized in germ cells, in particular in

spermatocytes and in the pre-acrosome of round spermatids, Detected in the acrosome of ejaculated spermatozoa, Detected in adult thymus, bone marrow, colon, small intestine, appendix and placenta, and in fetal liver and thymus

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Kinetochore scaffold 1 ALL1-fused gene from chromosome 15q14 protein AF15q14 Bub-linking kinetochore protein Blinkin Cancer susceptibility candidate gene 5 protein Cancer/testis antigen 29 CT29 Kinetochore-n
Molecular Weight	265.391 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:24054OMIM:604321Reactome:R-HSA-141444
Alternative Names	Kinetochore scaffold 1 ALL1-fused gene from chromosome 15q14 protein AF15q14 Bub-linking kinetochore protein Blinkin Cancer susceptibility candidate gene 5 protein Cancer/testis antigen 29 CT29 Kinetochore-n
Function	Performs two crucial functions during mitosis: it is essential for spindle-assembly checkpoint signaling and for correct chromosome alignment, Required for attachment of the kinetochores to the spindle microtubules, Directly links BUB1 and BUB1B to kinetochores, Part of the MIS12 complex, which may be fundamental for kinetochore formation and proper chromosome segregation during mitosis, Acts in coordination with CENPK to recruit the NDC80 complex to the outer kinetochore,
Cellular Localization	Nucleus, Chromosome, centromere, kinetochore,