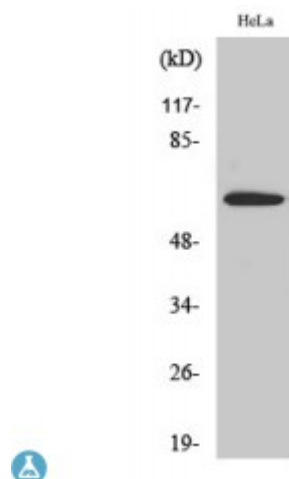


Anti-Sgo1 antibody



Description	Rabbit polyclonal to Sgo1.
Model	STJ95640
Host	Rabbit
Reactivity	Human
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human Sgo1
Immunogen Region	240-320 aa, Internal
Gene ID	151648
Gene Symbol	SGO1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
Specificity	Sgo1 Polyclonal Antibody detects endogenous levels of Sgo1 protein.
Tissue Specificity	Widely expressed. Highly expressed in testis. Expressed in lung, small intestine, breast, liver and placenta. Strongly overexpressed in 90% of breast cancers tested.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Shugoshin 1 Serologically defined breast cancer antigen NY-BR-85 Shugoshin-like 1
Molecular Weight	64 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:25088OMIM:609168
Alternative Names	Shugoshin 1 Serologically defined breast cancer antigen NY-BR-85 Shugoshin-like 1
Function	Plays a central role in chromosome cohesion during mitosis by preventing premature dissociation of cohesin complex from centromeres after prophase, when most of cohesin complex dissociates from chromosomes arms. May act by preventing phosphorylation of the STAG2 subunit of cohesin complex at the centromere, ensuring cohesin persistence at centromere until cohesin cleavage by ESPL1/separase at anaphase. Essential for proper chromosome segregation during mitosis and this function requires interaction with PPP2R1A. Its phosphorylated form is necessary for chromosome congression and for the proper attachment of spindle microtubule to the kinetochore. Necessary for kinetochore localization of PLK1 and CENPF. May play a role in the tension sensing mechanism of the spindle-assembly checkpoint by regulating PLK1 kinetochore affinity. Isoform 3 plays a role in maintaining centriole cohesion involved in controlling spindle pole integrity. Involved in centromeric enrichment of AUKRB in prometaphase.
Sequence and Domain Family	The KEN box and D-box 3 are required for its ubiquitination and degradation.
Cellular Localization	Nucleus Chromosome, centromere Chromosome, centromere, kinetochore Cytoplasm, cytoskeleton, spindle pole Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Localizes to the inner centromere throughout prophase until metaphase and disappears at anaphase . Centromeric localization requires the presence of BUB1 and the interaction with PPP2R1A . Colocalizes with NEK2 at the kinetochore . Colocalizes with and SS18L1 at the kinetochore . Phosphorylation by AUKRB and the presence of BUB1 are required for localization to the kinetochore . Isoform 1 primarily localizes to kinetochores during G2 phase and mitotic prophase, metaphase, and anaphase and does not appear to be associated with kinetochores during late mitosis . Isoform 3 is found at the centrosome in interphase and at spindle poles in mitosis and its spindle pole localization is PLK1 dependent . Isoform 3 does not localize to kinetochores during any stages of the cell cycle .
Post-translational Modifications	Ubiquitinated and degraded during mitotic exit by APC/C-Cdh1. Phosphorylation by NEK2 is essential for chromosome congression in mitosis and for the proper attachment of spindle microtubule to the kinetochore. Phosphorylated by PLK1 and AUKRB.