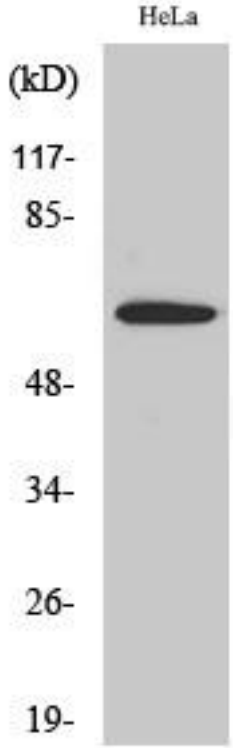
Sgo1 Monoclonal Antibody

Catalog No	BYmab-16776
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	SGOL1
Protein Name	Shugoshin-like 1
Immunogen	The antiserum was produced against synthesized peptide derived from human SGOL1. AA range:271-320
Specificity	Sgo1 Monoclonal Antibody detects endogenous levels of Sgo1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SGOL1; SGO1; Shugoshin-like 1; hSgo1; Serologically defined breast cancer antigen NY-BR-85
Observed Band	64kD
Cell Pathway	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 (PubMed:16541025). Centromeric localization requires the presence of BUB1 and the interaction with PPP2R1A (PubMed:16580887)(PubMed:16541025)(PubMed:15604152). Colocalizes with NEK2 at the kinetochore (PubMed:17621308). Colocalizes with and SS18L1 at the kinetochore (PubMed:16582621). Phosphorylation by AUKRB and the presence of BUB1 are required for localization to the kinetochore (PubMed:17617734). Isoform 1 primarily localizes to kinetochores during G2 phase and mitotic prophase, metaphase, and anaphase and does
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.

Function	developmental stage:Appears in prophase cells and remains present until metaphase. Strongly decreases at the onset of anaphase and completely disapears at telophase. Not present in interphase cells (at protein level).,domain:The D-box (destruction box) mediates the interaction with APC proteins, and may act as a recognition signal for degradation via the ubiquitin-proteasome pathway.,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.,miscellaneous:Strongly overexpressed in 90% of breast cancers tested.,PTM:Ubiquitinated by the ana
Background	The protein encoded by this gene is a member of the shugoshin family of proteins. This protein is thought to protect centromeric cohesin from cleavage during mitotic prophase by preventing phosphorylation of a cohesin subunit. Reduced expression of this gene leads to the premature loss of centromeric cohesion, mis-segregation of sister chromatids, and mitotic arrest. Evidence suggests that this protein also protects a small subset of cohesin found along the length of the chromosome arms during mitotic prophase. An isoform lacking exon 6 has been shown to play a role in the cohesion of centrioles (PMID: 16582621 and PMID:18331714). Mutations in this gene have been associated with Chronic Atrial and Intestinal Dysrhythmia (CAID) syndrome, characterized by the co-occurrence of Sick Sinus Syndrome (SSS) and Chronic Intestinal Pseudo-obstruction (CIPO) within the first four decades of life (PMID:25282101). Fibro
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Sgo1 Monoclonal Antibody