

## Sgo1 Polyclonal Antibody

<b>Catalog No :</b>	YT4275
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Sgo1
<b>Fields :</b>	>>Oocyte meiosis
<b>Gene Name :</b>	SGOL1
<b>Protein Name :</b>	Shugoshin-like 1
<b>Human Gene Id :</b>	151648
<b>Human Swiss Prot No :</b>	Q5FBB7
<b>Mouse Swiss Prot No :</b>	Q9CXH7
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human SGOL1. AA range:271-320
<b>Specificity :</b>	Sgo1 Polyclonal Antibody detects endogenous levels of Sgo1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 64kD

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**Cell Pathway :** Oocyte meiosis;

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**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

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**Function :** developmental stage:Appears in prophase cells and remains present until metaphase. Strongly decreases at the onset of anaphase and completely disappears 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

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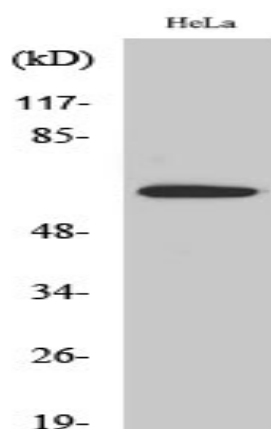
**Subcellular Location :** Nucleus . Chromosome, centromere . Chromosome, centromere, kinetochore . Cytoplasm, cytoskeleton, spindle pole . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Localizes to the inner centromere throughout prophase until metaphase and disappears at anaphase (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

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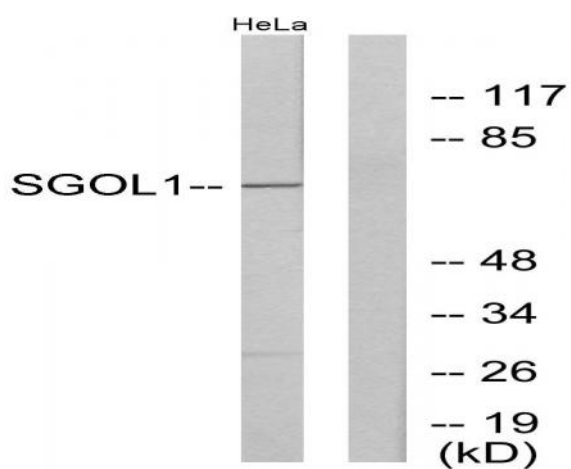
**Expression :** Widely expressed. Highly expressed in testis. Expressed in lung, small intestine, breast, liver and placenta. Strongly overexpressed in 90% of breast cancers tested.

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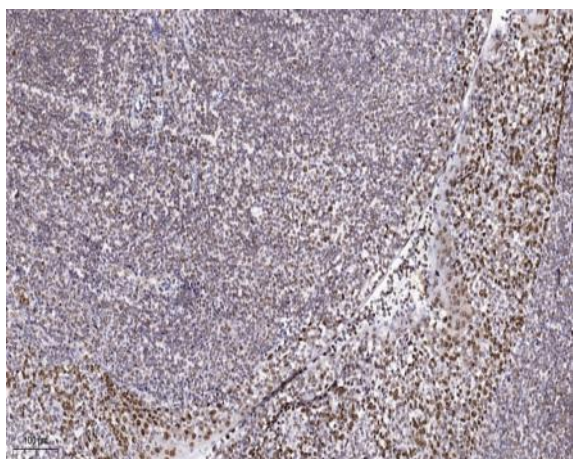
## Products Images



Western Blot analysis of various cells using Sgo1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Western blot analysis of lysates from HeLa cells, using SGOL1 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).