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SGOL1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17206c

Specification

SGOL1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q5FBB7
Other Accession	NP_001012409.1, NP_001012410.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**64190**
Antigen Region	**339-367**

SGOL1 Antibody (Center) - Additional Information

Gene ID 151648

Other Names
Shugoshin-like 1, hSgo1, Serologically defined breast cancer antigen NY-BR-85, SGOL1, SGO1

Target/Specificity
This SGOL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 339-367 amino acids from the Central region of human SGOL1.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SGOL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SGOL1 Antibody (Center) - Protein Information

Name SGO1 (HGNC:25088)

Synonyms SGOL1

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.

Cellular Location
Nucleus. Chromosome, centromere. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=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 not appear to be associated with kinetochores during late mitosis (PubMed:16582621). Isoform 3 is found at the centrosome in interphase and at spindle poles in mitosis and its spindle pole localization is PLK1 dependent (PubMed:16582621). Isoform 3 does not localize to kinetochores during any stages of the cell cycle (PubMed:16582621).

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

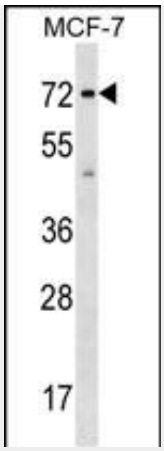
SGOL1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SGOL1 Antibody (Center) - Images

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SGOL1 Antibody (Center) (Cat. #AP17206c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the SGOL1 antibody detected the SGOL1 protein (arrow).

SGOL1 Antibody (Center) - Background

SGOL1 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.

SGOL1 Antibody (Center) - References

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