

## SGOL1 Ab

Cat.#: AF0543  
Size: 100ul,200ul

Concn.: 1mg/ml  
Source: Rabbit

Mol.Wt.: 64kDa  
Clonality: Polyclonal

Application: WB 1:500-1:2000

Reactivity: Human

Purification: The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Specificity: SGOL1 Ab detects endogenous levels of SGOL1.

Immunogen: A synthesized peptide derived from human SGOL1.

Uniprot: Q5FBB7

Description: SGO1 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.

Subcellular Location: Nucleus. Chromosome > centromere. Chromosome > centromere > kinetochore. Cytoplasm > cytoskeleton > spindle pole. Cytoplasm > cytoskeleton > centrosome. Localizes to the inner centromere throughout prophase until metaphase and disappears at anaphase. During prometaphase, it localizes to a single focus, while at metaphase, it localizes to 2 spots corresponding to the 2 centromeres. Centromeric localization requires the presence of BUB1 and the interaction with PPP2R1A. Localizes to the inner kinetochore from prophase to early metaphase. Co-localizes with NEK2 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.

Tissue Specificity: Widely expressed. Highly expressed in testis. Expressed in lung, small intestine, breast, liver and placenta. Strongly

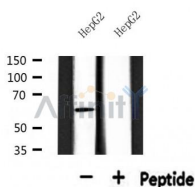
overexpressed in 90% of breast cancers tested.

**Similarity:**

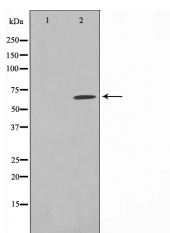
The KEN box and D-box 3 are required for its ubiquitination and degradation. Belongs to the shugoshin family.

**Storage Condition and Buffer:**

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.



Western blot analysis of extracts from HepG2, using SGOL1 Ab.



Western blot analysis on HeLa cell lysate using SGOL1 Ab, The lane on the left is treated with the antigen-specific peptide.

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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