

Rabbit SGOL1 Polyclonal Antibody | anti-SGOL1 antibody

Phospho-SGOL1 (Ser14) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329835	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (90%), Bovine (100%), Horse (100%), Rabbit (100%), Dog (100%), Xenopus (80%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

SGOL1; Polyclonal Antibody; Phospho-SGOL1 (Ser14) Antibody; hSgo 1; hSgo1; NY BR 85; Serologically defined breast cancer antigen NY BR 85; Serologically defined breast cancer antigen NY-BR-85; SGO 1; SGO; SGO L1; SGO1; SGOL 1; SGOL1_HUMAN; Shugoshin 1AB protein; Shugoshin 1CD protein; Shugoshin 1EFprotein; Shugoshin 1GH protein; Shugoshin 1KL protein; Shugoshin like 1 (S. pombe); Shugoshin like 1; Shugoshin-like 1; anti-SGOL1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (90%), Bovine (100%), Horse (100%), Rabbit (100%), Dog (100%), Xenopus (80%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-SGOL1 (Ser14) Antibody detects endogenous levels of SGOL1 only when phosphorylated at Ser14. 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-SGOL1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SGOL1 around the phosphorylation site of Ser14.
Conjugation	Unconjugated
Fragment	Fab fragment
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.
Subunit Structure	Interacts with PPP2CA (or PPP2CB), PPP2R1B, PPP2R5A, PPP2R5B, PPP2R5C, PPP2R5D, PPP2R5E, SET, LRRC59, RBM10 (or RBM5), RPL10A, RPL28, RPL7, RPL7A and RPLP1. Interaction with protein phosphatase 2A occurs most probably through direct binding to the regulatory B56 subunits: PPP2R1B, PPP2R5A, PPP2R5B, PPP2R5C, PPP2R5D, PPP2R5E. Interacts with PPP2R1A and NEK2. Isoform 3 interacts with PLK1. Interacts with CDCA8.
Similarity	The KEN box and D-box 3 are required for its ubiquitination and degradation. Belongs to the shugoshin family.

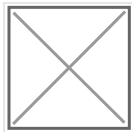
Subcellular Location	Nucleus. Chromosome>Centromere. Chromosome>Centromere>Kinetochore. Cytoplasm>Cytoskeleton>Spindle pole. Cytoplasm>Cytoskeleton>Microtubule organizing center>Centrosome. Note: Localizes to the inner centromere throughout prophase until metaphase and disappears at anaphase (PubMed:16541025). 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).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemisry)

At 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)

Staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis SGO1 (Phospho-Ser14) using Adriamycin treated HeLa whole cell lysates. -/+ means absence or presence of N peptide; ¼ non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-SGOL1 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	60302875
NCBI GeneID	151648
NCBI Accession #	NP_001012409.1
NCBI GenBank Nucleotide #	NM_001012409.2
UniProt Accession #	Q5FBB7; Q588H5; Q5FBB4; Q5FBB5; Q5FBB6; Q5FBB8; Q8N579; Q8WVL0; Q9BVA8; Q9H275
Molecular Weight	64,190 Da

NCBI Official Full Name	shugoshin-like 1 isoform A1
NCBI Official Synonym Full Names	shugoshin-like 1 (S. pombe)
NCBI Official Symbol	SGOL1
NCBI Official Synonym Symbols	SGO; Sgo1; NY-BR-85
NCBI Protein Information	shugoshin-like 1; hSgo1; shugoshin 1AB protein; shugoshin 1CD protein; shugoshin 1EF protein; shugoshin 1GH protein; shugoshin 1KL protein; serologically defined breast cancer antigen NY-BR-85
UniProt Protein Name	Shugoshin-like 1
UniProt Gene Name	SGOL1
UniProt Synonym Gene Names	SGO1; hSgo1
UniProt Entry Name	SGOL1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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 Online datasheet: <https://stage.aaabiotech.com/polyclonal/sgol1-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329835>