

SGOL2 Blocking Peptide (Center)

Synthetic peptide Catalog # BP20106c

Specification

SGOL2 Blocking Peptide (Center) - Product Information

Primary Accession Q562F6
Other Accession NP_689737.3

SGOL2 Blocking Peptide (Center) - Additional Information

Gene ID 151246

Other Names

Shugoshin-like 2, Shugoshin-2, Sgo2, Tripin, SGOL2

Target/Specificity

The synthetic peptide sequence is selected from aa 406-419 of HUMAN SGOL2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SGOL2 Blocking Peptide (Center) - Protein Information

Name SGO2 (<u>HGNC:30812</u>)

Synonyms SGOL2

Function

Cooperates with PPP2CA to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I. Has a crucial role in protecting REC8 at centromeres from cleavage by separase. During meiosis, protects centromeric cohesion complexes until metaphase II/anaphase II transition, preventing premature release of meiosis-specific REC8 cohesin complexes from anaphase I centromeres. Is thus essential for an accurate gametogenesis. May act by targeting PPP2CA to centromeres, thus leading to cohesin dephosphorylation (By similarity). Essential for recruiting KIF2C to the inner centromere and for correcting defective kinetochore attachments. Involved in centromeric enrichment of AUKRB in prometaphase.

Cellular Location

Nucleus. Chromosome, centromere. Chromosome, centromere, kinetochore {ECO:0000250|UniProtKB:Q7TSY8}. Note=During meiosis I, accumulates at centromeres during



diplotene, and colocalizes differentially with the cohesin subunits RAD21 and REC8 at metaphase I centromeres (By similarity). SGO2 and RAD21 change their relative distributions during telophase I when sister-kinetochore association is lost (By similarity). During meiosis II, it shows a striking tension- dependent redistribution within centromeres throughout chromosome congression during prometaphase II, as it does during mitosis (By similarity). In Hela cells, localizes at centromeres throughout prophase until metaphase and disappears at anaphase (PubMed:17485487) Centromeric localization requires the presence of BUB1 and AUKRB (PubMed:17485487). {ECO:0000250|UniProtKB:Q7TSY8, ECO:0000269|PubMed:17485487}

SGOL2 Blocking Peptide (Center) - Protocols

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

• Blocking Peptides

SGOL2 Blocking Peptide (Center) - Images

SGOL2 Blocking Peptide (Center) - Background

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SGOL2 Blocking Peptide (Center) - References

Tanno, Y., et al. Genes Dev. 24(19):2169-2179(2010) Ross, C.J., et al. Nat. Genet. 41(12):1345-1349(2009) Lee, J., et al. Nat. Cell Biol. 10(1):42-52(2008) Huang, H., et al. J. Cell Biol. 177(3):413-424(2007) Kitajima, T.S., et al. Nature 441(7089):46-52(2006)