

## Product datasheet for TP313965L

### Shugoshin (SGO1) (NM\_001012411) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human shugoshin-like 1 ( <i>S. pombe</i> ) (SGOL1), transcript variant B1, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC213965 representing NM_001012411 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	<p>MAKERCLKKSFQDSLEDIKKRMKEKRNKNLAEIGKRRSFIAAPCQIITNTSTLLKNYQDNNKMLVLALEN EKSKVKEAQDIIQLRKECYLTCQLYALKGKLT SQQTVEPAQNQEICSSGMDPNSDDSSRNLFVKDLPQ IPLEETELPGQGESFQIEDQIPTIPQDTLGVDFDSATPPETQQSPHLSLKDITNVS LYPVVKIRRLSLSLSP KKNKASPAVALPKRRCTASVNYKEPTLASKLRRGDPFTDLCFLNSPIFKQKKDLRRSKKSMKQIQ</p> <p><b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b></p>
Tag:	C-Myc/DDK
Predicted MW:	31.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_001012411</a></u>
Locus ID:	151648



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UniProt ID: [Q5FBB7](#)

RefSeq Size: 1200

Cytogenetics: 3p24.3

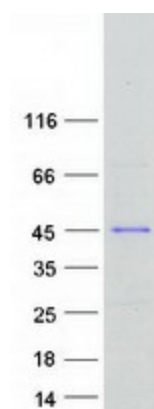
RefSeq ORF: 825

Synonyms: CAID; NY-BR-85; SGO; SGOL1

**Summary:** 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). Fibroblast cells from CAID patients exhibited both increased cell proliferation and higher rates of senescence. Pseudogenes of this gene have been found on chromosomes 1 and 7. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]

**Protein Pathways:** Oocyte meiosis

### Product images:



Coomassie blue staining of purified SGO1 protein (Cat# [TP313965]). The protein was produced from HEK293T cells transfected with SGO1 cDNA clone (Cat# [RC213965]) using MegaTran 2.0 (Cat# [TT210002]).