

Product datasheet for TP316188

OriGene Technologies, Inc.

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Shugoshin (SGO1) (NM_001012413) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human shugoshin-like 1 (S. pombe) (SGOL1), transcript variant C1, 20

με

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC216188 representing NM_001012413

or AA Sequence: Red=Cloning site Green=Tags(s)

 $\label{thm:label} MAKERCLKKSFQDSLEDIKKRMKEKRNKNLAEIGKRRSFIAAPCQIITNTSTLLKNYQDNNKMLVLALEN \\ EKSKVKEAQDIILQLRKECYYLTCQLYALKGKLTSQQTVEPAQNQEICSSGMDPNSDDSSRNLFVKDLPQ \\ IPLEETELPGQGESFQIEATPPETQQSPHLSLKDITNVSLYPVVKIRRLSLSPKKNKASPAVALPKRRCT$

ASVNYKEPTLASKLRRGDPFTDLCFLNSPIFKQKKDLRRSKKSMKQIQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 29.3 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: NP 001012413

Locus ID: 151648



Shugoshin (SGO1) (NM_001012413) Human Recombinant Protein - TP316188

UniProt ID: Q5FBB7
RefSeq Size: 1149
Cytogenetics: 3p24.3
RefSeq ORF: 774

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

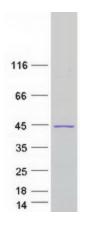
Summary: The protein encoded by this gene is a member of the shugoshin family of proteins. This

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# TP316188). The protein was produced from HEK293T cells transfected with SGO1 cDNA clone (Cat# [RC216188]) using MegaTran 2.0 (Cat# [TT210002]).