BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-SGOL2 Antibody (Center)

Catalog Number: A30763-1

About SGO2

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.

Overview

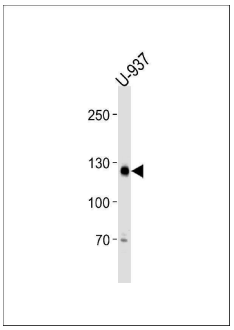
Product Name	Anti-SGOL2 Antibody (Center)
Reactive Species	Human
Description	Boster Bio Anti-SGOL2 Antibody (Center) (Catalog # A30763-1). Tested in WB application(s). This antibody reacts with Human.
Application	WB
Clonality	Polyclonal
Formulation	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage Instructions	Maintain refrigerated at 2-8°C for up to 2 weeks. For long-term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q562F6

Technical Details

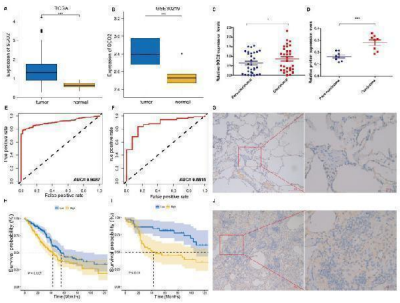
Immunogen	This SGOL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-419 amino acids from the Central region of human SGOL2.
Predicted Reactive Species	Bovine, Chicken, Mouse, Pig, Rat, Zebrafish
Isotype	Rabbit IgG
Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Suggested Dilutions	WB: 1:1000

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

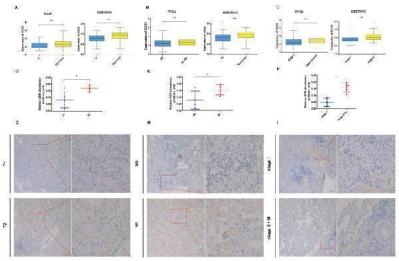
Anti-SGOL2 Antibody (Center) (A30763-1) Images



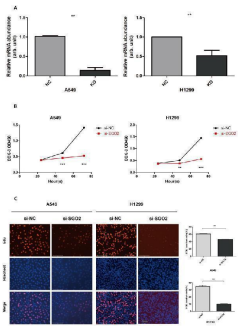
SGOL2 Antibody (Center) western blot analysis in U-937 cell line lysates (35ug/lane).This demonstrates the SGOL2 antibody detected the SGOL2 protein (arrow).



SGO2 increases the risk of poor prognosis for LUAD. (A, E, and H) Based on the TCGA database, SGO2 expression, ROC curve, and survival analysis in LUAD. (B, F, and I) Based on the GEO database, the validation dataset was used to verify the SGO2 expression, ROC curve, and survival analysis in LUAD. (C) The expression of SGO2 in LUAD and normal tissue. (D) The protein expression of SGO2 in LUAD and normal tissue. (G and J) Immunohistochemical staining of SGO2 in LUAD and normal tissue.Index in PubMed under a CC BY license. PMID: 37576392

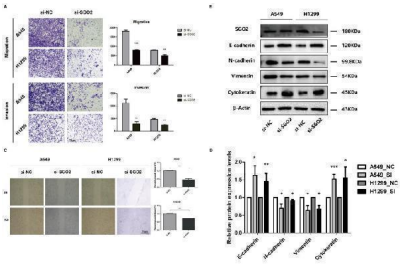


High SGO2 is associated with a higher TNM stage of LUAD. (A) Based on the TCGA and , the expression of SGO2 in T1 vs T2. (B) Based on the TCGA and , the expression of SGO2 in N0 vs N1. (C) Based on the TCGA and , the expression of SGO2 in stage I vs stage II + III. (D and G) Based on IHC, the protein expression and staining of SGO2 in T1 vs T2. (E and H) Based on IHC, the protein expression and staining of SGO2 in N0 vs N1. (F and I) Based on IHC, the protein expression and staining of SGO2 in stage I vs stage II + III.Index in PubMed under a CC BY license. PMID: 37576392

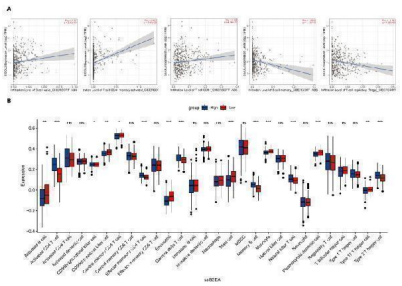


SGO2 silencing inhibits the proliferation of lung cancer cells. (A)SGO2 expression after knockdown in A549 and H1299. (B)CCK8 assays were performed to detect A549 and H1299 proliferation. (C)Edu assays were performed to detect A549 and H1299 proliferation.Index in PubMed under a CC BY license. PMID: 37576392

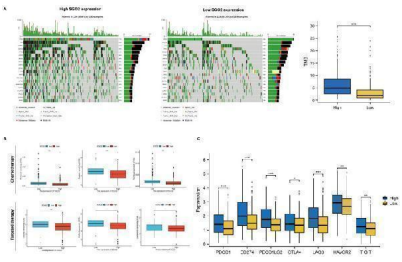
The downregulation of SGO2 affects migration, invasion, and EMT. (A) A Transwell assay was performed to examine the effect of SGO2 knockdown on A549 and H1299 cells. (C) A wound healing assay was performed to examine the effect of SGO2 knockdown on A549 and H1299 cells. (B and D) WB assay the expression levels of E-cadherin, N-cadherin, Vimentin, and Cytokeratin in A549 and H1299 to evaluate



the effect on EMT after SGO2 knockdown.Index in PubMed under a CC BY license. PMID: 37576392



SGO2 expression and tumor immune infiltration. (A) the expression of SGO2 was positively correlated with the infiltration of Memory B cells, Activated CD4+ memory T cells, and CD8+ T cells, while the infiltration of Memory B cells and Tregs decreased with increasing SGO2 expression. (B) Correlation of SGO2 expression with 28 distinct types of tumor-infiltrating immune cells based on ssGSEA.Index in PubMed under a CC BY license. PMID: 37576392



High SGO2 has multiple therapeutic benefits. (A) Comparison of mutational landscapes of SGO between high cluster and low cluster, and Comparison of tumor mutation burden (TMB) between two clusters. (B) Comparison of first-line chemotherapy and targeted therapy drug targets of high and low SGO2 clusters. (C) Comparison of immunomodulatory drug targets of high and low SGO2 clusters.Index in PubMed under a CC BY license. PMID: 37576392

Anti-SGOL2 Antibody (Center)

For Research Use Only. Not for use in diagnostic procedures.