abcam

ab139683

Anti-SLD5 antibody [EPR9318]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR9318
Purification technique	Affinity purification Protein A
Concentration	1.205 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Rat, Human, Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Rat, Human, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information GINS4

Function	Required for correct functioning of the GINS complex, a complex that plays an essential role in the initiation of DNA replication, and progression of DNA replication forks (PubMed:17417653, PubMed:28414293). GINS complex is a core component of CDC45-MCM-GINS (CMG) helicase, the molecular machine that unwinds template DNA during replication, and around which the replisome is built (PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SLD5 also known as GINS4 is a subunit of the GINS complex. It has a molecular mass of approximately 22 kDa. SLD5 plays a significant role in DNA replication specifically during the initiation and elongation phases. The protein is expressed in various tissues with higher levels observed in proliferating cells. By binding to DNA replication origins SLD5 ensures the proper unwinding and loading of other replication factors.
Biological function summary	SLD5 interacts with other components of the GINS complex to form a stable structure necessary for the replication fork's progression. The GINS complex comprising SLD5 PSF1 PSF2 and PSF3 couples with other protein assemblies like CDC45 and MCM (mini chromosome maintenance) proteins. This dynamic association enables the replication machinery to effectively duplicate the genome without errors.
Pathways	SLD5 plays a part in the initiation of the DNA replication pathway. It partners with proteins like CDC45 and the MCM complex to form a replicative helicase. This assembly serves to unwound the DNA double helix facilitating replication. Furthermore interactions with ATR and ATM pathways position SLD5 within the larger network of DNA damage response ensuring any replication stress is adequately managed.
Associated diseases and disorders	SLD5 exhibits connections with cancers such as breast cancer and colorectal cancer. Alterations in SLD5 expression can influence tumor progression by modulating cell proliferation rates. Through these pathways proteins like MCM and CDC45 are also implicated serving as key regulators in oncogenic processes where SLD5 activity expands its influence. Understanding these relationships offers insights into potential therapeutic targets for controlling abnormal cell growth.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

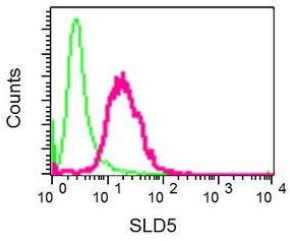
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

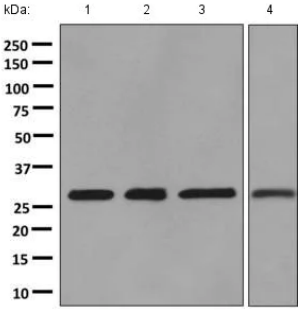
2 product images



Flow Cytometry (Intracellular) - Anti-SLD5 antibody [EPR9318] (ab139683)

SLD5 Flow Cytometry (Intracellular) staining using rabbit Anti-SLD5 antibody

Intracellular flow cytometric analysis of permeabilized 293T cells labeling SLD5 with ab139683 at 1/100 dilution (red). Rabbit IgG negative control (green).



Western blot - Anti-SLD5 antibody [EPR9318] (ab139683)

All lanes:
Western blot - Anti-SLD5 antibody [EPR9318] (ab139683) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

Lane 2:
PC3 cell lysate at 10 µg

Lane 3:
Jurkat cell lysate at 10 µg

Lane 4:
C6 cell lysate at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 26 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.