abcam

ab278632

Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12]

Recombinant | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human HCLS1 pY397. The exact immunogen used to generate this antibody is proprietary information. Database link P14317
Clone number	HS1Y397-F12
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	0.001-1 µg/mL

Notes	-

Species	Human
Dilution info	0.001-1 µg/mL
Notes	-

WB

Tested

Species	Human
Dilution info	0.01 µg/mL
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information HCLS1 pY397

Function	Substrate of the antigen receptor-coupled tyrosine kinase. Plays a role in antigen receptor signaling for both clonal expansion and deletion in lymphoid cells. May also be involved in the regulation of gene expression.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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	The hematopoietic cell-specific Lyn substrate 1 commonly known as HCLS1 or HS1 is a cytoskeletal protein involved in cell signaling. It has a molecular mass of approximately 75 kDa and is expressed predominantly in hematopoietic cells such as lymphocytes and myeloid cells. HCLS1 functions as an adaptor protein playing an important role in the reorganization of the actin cytoskeleton which is critical for cell motility and morphology.
Biological function summary	The protein is important for signal transduction processes in immune cells particularly during the immune response. HCLS1 becomes phosphorylated upon cell activation allowing it to associate with other signaling proteins. It forms complexes with various partners like Lyn kinase and other SH2-containing proteins facilitating cytoskeletal rearrangement and cellular interactions necessary for effective immune function.
Pathways	HCLS1 is involved in key signaling pathways such as the B-cell receptor (BCR) and T-cell receptor (TCR) signaling pathways. In these pathways it works alongside proteins like SLP-76 and Vav to propagate signals that lead to cellular activation and differentiation. HCLS1's ability to bind and interact with proteins in these pathways highlights its role in orchestrating cellular immune responses.
Associated diseases and disorders	HCLS1 has been implicated in certain autoimmune conditions and cancers including chronic lymphocytic leukemia (CLL) and systemic lupus erythematosus (SLE). In these contexts aberrant expression or activity of HCLS1 can disrupt normal immune signaling leading to pathological conditions. Additionally its interaction with proteins such as Bcl-2 in CLL suggests a role in apoptosis regulation further linking HCLS1 to disease progression and treatment response.

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.

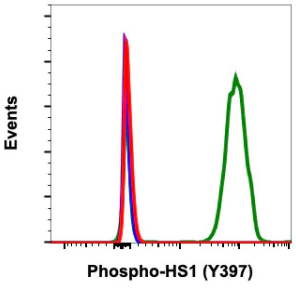
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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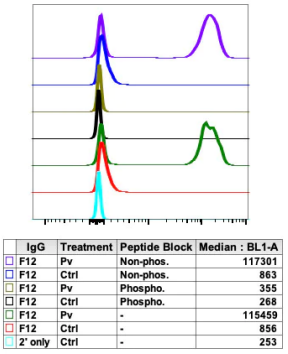
4 product images



Flow Cytometry - Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12] (ab278632)

HCLS1 (phospho Y397) Flow Cytometry staining using rabbit Anti-HCLS1 (phospho Y397) antibody

Flow cytometric analysis of Ramos cells secondary antibody only negative control (blue) or untreated (red) or treated with pervanadate (green) using ab278632 at 0.01µg/mL.

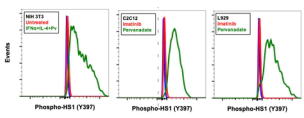


IgG	Treatment	Peptide Block	Median : BL1-A
F12	Pv	Non-phos.	117301
F12	Ctrl	Non-phos.	863
F12	Pv	Phospho.	355
F12	Ctrl	Phospho.	268
F12	Pv	-	115459
F12	Ctrl	-	856
2° only	Ctrl	-	253

Flow Cytometry - Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12] (ab278632)

HCLS1 (phospho Y397) Flow Cytometry staining using rabbit Anti-HCLS1 (phospho Y397) antibody

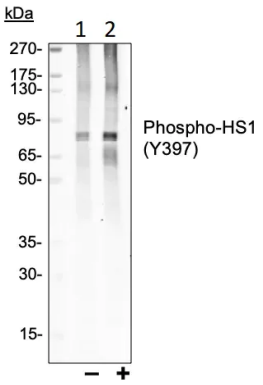
Peptide blocking flow cytometric analysis of Ramos cells secondary antibody only negative control (light blue) or untreated (red) or treated with pervandadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using ab278632 at 0.01µg/mL.



Flow Cytometry - Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12] (ab278632)

HCLS1 (phospho Y397) Flow Cytometry staining using rabbit Anti-HCLS1 (phospho Y397) antibody

Flow cytometric analysis of mouse cells secondary antibody only negative control (blue) or control (red) or stimulated (green) using ab278632 at 0.01µg/mL.



Western blot - Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12] (ab278632)

All lanes:
Western blot - Anti-HCLS1 (phospho Y397) antibody [HS1Y397-F12] (ab278632) at 0.01 µg/mL

Lane 1:
Ramos cell extract, untreated

Lane 2:
Ramos cell extract, treated with 300 nM Thapsigargin for 30 minutes

Predicted band size: 54 kDa

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