abcam

ab257321

Anti-ICOSL/CD275 antibody [ICOSL/3111]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human ICOSLG aa 1-150. The exact immunogen used to generate this antibody is proprietary information. Database link O75144
Clone number	ICOSL/3111
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from bioreactor concentrate.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells

Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	1-2ug/ml for 30 min at RT. Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information ICOSL/CD275

Function	Ligand for the T-cell-specific cell surface receptor ICOS. Acts as a costimulatory signal for T-cell proliferation and cytokine secretion (PubMed:11007762, PubMed:11023515, PubMed:30498080). Also induces B-cell proliferation and differentiation into plasma cells. Could play an important role in mediating local tissue responses to inflammatory conditions, as well as in modulating the secondary immune response by co-stimulating memory T-cell function (By similarity). In endothelial cells, required for proper neutrophil transmigration in response to chemoattractants, such as CXCL8/IL8 or N-formyl-methionyl peptides (fMLP) (PubMed:30498080).

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

Supplementary info

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

Activity summary	The ICOS Ligand also known as ICOSL B7-H2 and HK53 is a critical component in immune system function. This protein with a molecular mass of approximately 65 kDa is expressed on professional antigen-presenting cells such as dendritic cells macrophages and B cells. It plays a significant mechanical role in the immune response by engaging with its counter receptor the ICOS protein present on the surface of activated T cells. This interaction supports the regulation of T cell activity influencing proliferation and cytokine production.
Biological function summary	ICOSL contributes to the modulation of immune responses. By forming a complex with the active ICOS protein ICOSL is involved in the co-stimulation of T cells. This process is important for the development of T-cell-dependent immune responses and helps in promoting the survival and differentiation of T cells. Together the ICOS ligand and ICOS protein create a dynamic interaction that balances immune activation and tolerance which is essential for maintaining immune homeostasis.
Pathways	The ICOS-ICOSL interaction plays an important role in the T-cell receptor (TCR) signaling pathway. This pathway is fundamental for the activation of T cells and subsequent immune response. ICOSL also connects to the PI3K/Akt pathway where it impacts cell survival and proliferation. ICOS and the PI3K/Akt pathway work together to influence various aspects of immune regulation and adaptive immunity.
Associated diseases and disorders	ICOSL has a notable impact on autoimmune diseases and cancer. Its function in immune modulation when dysregulated can contribute to autoimmune conditions such as systemic lupus erythematosus. In this context the abnormal activation of the ICOS protein may exaggerate immune responses leading to pathology. In cancer high expression of ICOSL can support tumor progression by affecting the immune surveillance capability. These associations reveal ICOSL's role in balancing immune activation and inhibition which is important in the context of disease.

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.

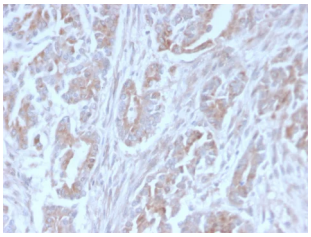
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

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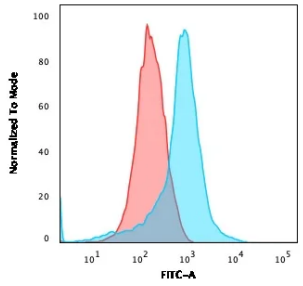
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICOSL/CD275 antibody [ICOSL/3111] (ab257321)

ICOSL/CD275 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-ICOSL/CD275 antibody

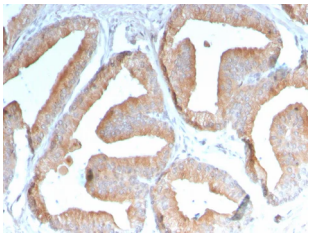
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human colon carcinoma staining ICOS Ligand/ICOSL with ab257321 at 2µg/ml for 30 minutes at room temperature.



Flow Cytometry - Anti-ICOSL/CD275 antibody [ICOSL/3111] (ab257321)

ICOSL/CD275 Flow Cytometry staining using mouse Anti-ICOSL/CD275 antibody

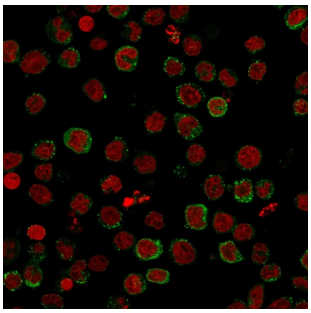
Flow Cytometric analysis of U937 cells staining ICOSL with ab257321, followed by a goat anti-Mouse IgG-CF488 secondary antibody (blue). Isotype control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICOSL/CD275 antibody [ICOSL/3111] (ab257321)

ICOSL/CD275 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-ICOSL/CD275 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human prostate carcinoma staining ICOS Ligand/ICOSL with ab257321 at 2µg/ml for 30 minutes at room temperature.



Immunocytochemistry/ Immunofluorescence - Anti-ICOSL/CD275 antibody [ICOSL/3111] (ab257321)

ICOSL/CD275 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-ICOSL/CD275 antibody

Immunocytochemistry/Immunofluorescent analysis of U937 cells staining ICOS ligand/ICOSL with ab257321 at 2µg/ml, followed by goat anti-Mouse IgG conjugated to CF488 secondary antibody (green)/ Nuclei counterstained with Reddot (red).

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