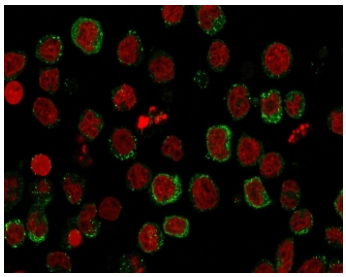
ICOSL Antibody / T-Cell Costimulation Marker [clone ICOSL/3111] (V7578)

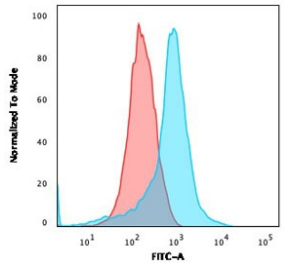
Catalog No.	Formulation	Size
V7578-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7578-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7578SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7578IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

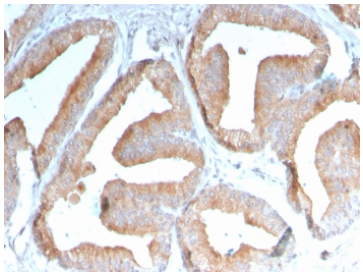
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ICOSL/3111
Purity	Protein G affinity chromatography
UniProt	O75144
Localization	Cell surface
Applications	ELISA (order BSA/sodium azide-free format for coating) Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This ICOSL Antibody / T-Cell Costimulation Marker is available for research use only.



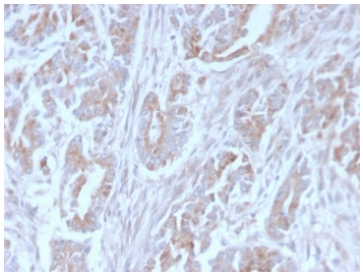
ICOSL Antibody U937 Cell IF. Immunofluorescence staining of human U937 cells using clone ICOSL/3111 (green) and Reddot nuclear counterstain (red). Inducible T-cell costimulator ligand / ICOSLG displays predominantly membranous and cytoplasmic fluorescence consistent with its role as a B7 family immune checkpoint ligand involved in antigen-presenting cell communication and adaptive T-cell costimulation signaling pathways.



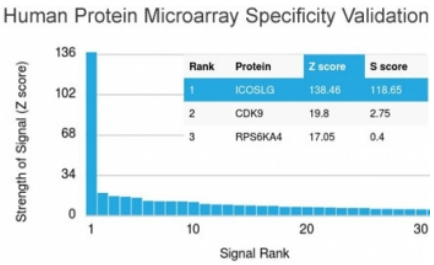
ICOSL Antibody U937 Cell FACS. Flow cytometry analysis of human U937 cells stained with clone ICOSL/3111 (blue) and matched isotype control (red). The observed fluorescence shift demonstrates surface-associated expression of Inducible T-cell costimulator ligand / ICOSLG, consistent with its role as a B7 family costimulatory ligand involved in antigen-presenting cell signaling and adaptive immune activation pathways regulating T-cell responses.



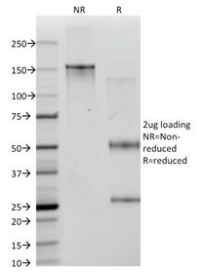
ICOSL Antibody Prostate Carcinoma IHC. Immunohistochemistry analysis of FFPE human prostate carcinoma tissue stained with clone ICOSL/3111. Tumor epithelial cells display strong membranous and cytoplasmic HRP-DAB brown staining consistent with expression of Inducible T-cell costimulator ligand / ICOSLG, a B7 family immune regulatory protein involved in adaptive immune signaling and T-cell costimulation pathways within the tumor microenvironment. Adjacent stromal regions show comparatively lower staining intensity. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



ICOSL Antibody Colon Carcinoma IHC. Immunohistochemistry analysis of FFPE human colon carcinoma tissue stained with clone ICOSL/3111. Tumor epithelial cells demonstrate membranous and cytoplasmic HRP-DAB brown staining consistent with expression of Inducible T-cell costimulator ligand / ICOSLG, an immune checkpoint-associated B7 family ligand involved in adaptive immune regulation and T-cell costimulation signaling within the tumor microenvironment. Stromal connective tissue shows comparatively reduced staining intensity. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



ICOSL Antibody Protein Microarray Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using clone ICOSL/3111. These results demonstrate high specificity of the mouse monoclonal antibody for Inducible T-cell costimulator ligand / ICOSLG, a B7 family immune checkpoint ligand involved in adaptive immune activation and T-cell costimulation signaling. Z- and S-score analysis confirms strong preferential binding to the intended target relative to non-specific proteins represented on the HuProt(TM) array. The Z-score represents the signal strength generated by antibody binding to an individual protein relative to the overall array background, while the S-score reflects the relative specificity gap between the top-ranked target and subsequent proteins on the array.



SDS-PAGE analysis of purified, BSA-free ICOSLG / ICOSL antibody (clone ICOSL/3111) as confirmation of integrity and purity.

Description

Inducible T-cell costimulator ligand (ICOSLG) is a membrane-associated immune regulatory protein that functions as a critical mediator of adaptive immune activation and T-cell costimulation signaling. ICOSL Antibody / T-Cell Costimulation Marker is useful for studying immune checkpoint biology, antigen-presenting cell interactions, and lymphocyte activation pathways associated with adaptive immunity and tumor immunology. ICOSL antibody, also referred to as ICOS ligand antibody, CD275 antibody, B7-H2 antibody, and B7RP-1 antibody in the literature, recognizes a B7 family costimulatory ligand that binds the inducible T-cell costimulator receptor (ICOS) expressed on activated T lymphocytes.

ICOSLG is predominantly expressed on antigen-presenting cells including dendritic cells, macrophages, monocytes, and activated B cells, although expression has also been reported in endothelial cells, epithelial tissues, fibroblasts, and selected tumor microenvironments. The protein is primarily localized to the plasma membrane where it participates in immune synapse formation and communication between antigen-presenting cells and T lymphocytes. Engagement of ICOS by ICOSLG promotes T-cell proliferation, cytokine secretion, survival signaling, and differentiation of follicular helper T cells involved in germinal center maintenance and antibody-mediated immunity. Through these functions, ICOSLG contributes to regulation of adaptive immune responses and maintenance of immune homeostasis.

ICOS-ICOSLG signaling has emerged as an important regulatory axis in cancer immunology and immune checkpoint research. Altered expression of ICOSLG within the tumor microenvironment may influence T-cell exhaustion, immune evasion, inflammatory signaling, and responsiveness to checkpoint-directed immunotherapies. Increased interest in this pathway has led to expanding investigation of ICOSLG expression across tumor-associated immune infiltrates, stromal compartments, and epithelial malignancies. Because ICOSLG functions as a costimulatory checkpoint ligand, the target is highly relevant for studies focused on antitumor immunity, immune regulation, and therapeutic modulation of adaptive immune signaling pathways.

In addition to oncology applications, ICOSLG has been implicated in autoimmune disease, chronic inflammatory disorders, infectious disease responses, and regulation of humoral immunity. ICOSLG-mediated signaling contributes to B-cell and T-cell communication networks associated with cytokine regulation, germinal center architecture, and maintenance of activated lymphocyte populations. Dysregulated signaling through the ICOS pathway has been associated with abnormal inflammatory responses and altered immune tolerance mechanisms, supporting continued interest in ICOSLG as a marker of adaptive immune activation and immune checkpoint function.

Immunohistochemistry, immunofluorescence, and flow cytometry studies commonly demonstrate membranous and cytoplasmic staining patterns consistent with expression in activated immune cell populations and epithelial tissues involved in adaptive immune interactions. A mouse monoclonal clone ICOSL/3111 antibody can be used for immunofluorescence, flow cytometry, immunohistochemistry, and protein microarray specificity validation studies examining T-cell costimulation pathways and immune checkpoint signaling networks. Because ICOSLG functions at the interface of antigen presentation and adaptive immune regulation, this target remains highly relevant for studies investigating lymphocyte activation, tumor immunology, and immune communication mechanisms.

Researchers investigating immune checkpoint signaling, antigen-presenting cell biology, and adaptive immune activation pathways may also be interested in our broader Immunology Antibodies collection featuring targets involved in T-cell regulation, cytokine signaling, and tumor immunology research.

Application Notes

Optimal dilution of the ICOSL Antibody / T-Cell Costimulation Marker should be determined by the researcher.
1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant fragment of human ICOS Ligand / B7RP-1 protein within amino acids 23-149 was used as the immunogen for the ICOSLG / ICOSL antibody.

Storage

Store the ICOSLG / ICOSL antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

ICOS ligand antibody, ICOSLG antibody, CD275 antibody, B7-H2 antibody, B7RP-1 antibody

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