# abcam

### Product datasheet

# Anti-ICOS antibody [SP98] ab105227



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#### Overview

Product name Anti-ICOS antibody [SP98]

**Description** Rabbit monoclonal [SP98] to ICOS

Host species Rabbit

Tested applications Suitable for: IHC-P, IHC-Fr

Species reactivity Reacts with: Human

Predicted to work with: Mouse

Immunogen Synthetic peptide within Human ICOS aa 150 to the C-terminus (C terminal). The exact sequence

is proprietary.

Database link: Q9Y6W8

Positive control IHC-P: Human lymph node, pancreatic adenocarcinoma, thymus and tonsil tissue. IHC-Fr: Frozen

human tonsil tissue sections

**General notes**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 production

For more information see here.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** pH: 7.60

Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Purity Protein A/G purified

**Purification notes** Purified from TCS by protein A/G.

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**Clonality** Monoclonal

Clone number SP98

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab105227 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	<b>★★★★</b> (1)	1/100. Perform antigen retrieval before commencing with IHC staining protocol by boiling tissue section in EDTA buffer, pH 8.0 for 10 min followed by cooling at RT for 20 min.
IHC-Fr	★ 音 音 音 音 (1)	1/100.

#### **Target**

Function Enhances all basic T-cell responses to a foreign antigen, namely proliferation, secretion of

lymphokines, up-regulation of molecules that mediate cell-cell interaction, and effective help for antibody secretion by B-cells. Essential both for efficient interaction between T and B-cells and for normal antibody responses to T-cell dependent antigens. Does not up-regulate the production of interleukin-2, but superinduces the synthesis of interleukin-10. Prevents the apoptosis of preactivated T-cells. Plays a critical role in CD40-mediated class switching of immunoglobin

isotypes.

Tissue specificity Activated T-cells. Highly expressed on tonsillar T-cells, which are closely associated with B-cells

in the apical light zone of germinal centers, the site of terminal B-cell maturation. Expressed at lower levels in thymus, lung, lymph node and peripheral blood leukocytes. Expressed in the

medulla of fetal and newborn thymus.

**Involvement in disease** Immunodeficiency, common variable, 1

Sequence similarities Contains 1 lg-like V-type (immunoglobulin-like) domain.

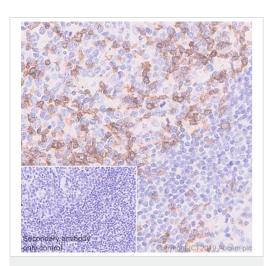
**Post-translational** N-g

modifications

N-glycosylated.

**Cellular localization** Secreted and Cell membrane.

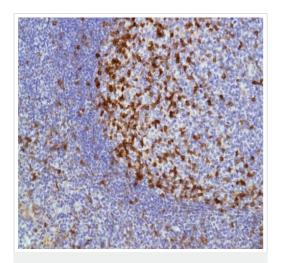
## **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICOS antibody [SP98] (ab105227)

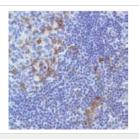
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue sections labeling ICOS with ab105227 at 1/100 dilution (0.28  $\mu$ g/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 30 mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain. Sporadically positive staining in the germinal center of human tonsil, performed on a Leica Biosystems BOND<sup>TM</sup> RX instrument.

The section was incubated with ab105227 for 30 mins at room temperature.



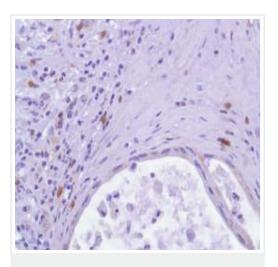
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICOS antibody [SP98] (ab105227)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for ICOS using ab105227 at 1/100 dilution in immunohistochemical analysis.



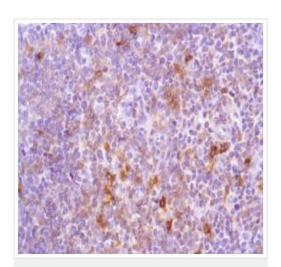
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICOS antibody [SP98] (ab105227)

ab105227, at 1/100 dilution, staining ICOS in formalin-fixed, paraffin-embedded Human reactive lymph node tissue by Immunohistochemistry.



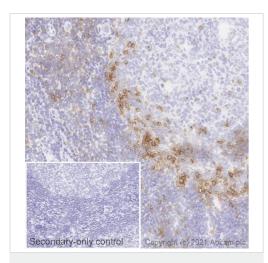
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICOS antibody [SP98] (ab105227)

Formalin-fixed, paraffin-embedded human pancreatic adenocarcinoma tissue stained for ICOS using ab105227 at 1/100 dilution in immunohistochemical analysis.

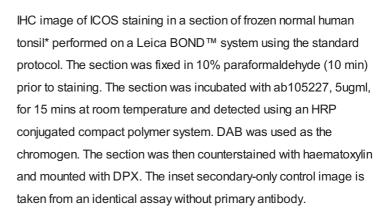


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICOS antibody [SP98] (ab105227)

Formalin-fixed, paraffin-embedded human thymus tissue stained for ICOS using ab105227 at 1/100 dilution in immunohistochemical analysis.

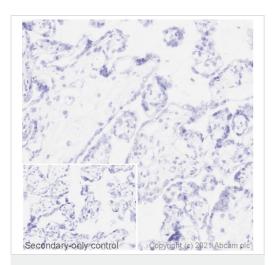


Immunohistochemistry (Frozen sections) - Anti-ICOS antibody [SP98] (ab105227)



For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

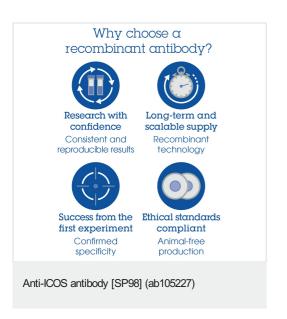


Immunohistochemistry (Frozen sections) - Anti-ICOS antibody [SP98] (ab105227)

Negative control image: IHC image of ICOS staining in a section of frozen normal human placenta\* performed on a Leica BONDTM system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab105227, 5ugml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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