

# hICOS-L-Fc

Soluble human ICOS-L fused to an IgG1 Fc domain

Cat. code: fc-hicosl

<https://www.invivogen.com/icosl-fc>

For research use only

Version 23L08-NJ

## PRODUCT INFORMATION

### Content:

- 50 µg of lyophilized hICOS-L-Fc protein
- 1.5 ml endotoxin-free water

### Protein construction:

Codon-optimized human ICOS-L N-terminal extra-cellular domain [D19-T256] with a C-terminal human IgG1 Fc tag

**Accession sequence:** NP\_001382847.1 (native sequence)

**Species:** Human

**Source:** CHO cells

**Tag:** C-terminal human IgG1 Fc

**Total protein size:** 482 a.a. (secreted form)

**Molecular weight:** ~ 70 kDa (SDS-PAGE)

**Purification:** Protein G affinity chromatography

**Purity:** >94% (SDS-PAGE)

### Formulation:

0.2 µm filtered solution in sodium phosphate buffer with glycine, saccharose and stabilizing agents

### Storage:

- Product is shipped at room temperature. Store lyophilized hICOS-L-Fc at -20°C. Lyophilized product is stable for at least 1 year.
- Reconstituted hICOS-L-Fc is stable for 1 month when stored at 4°C and for 1 year when stored at -20°C. Avoid repeated freeze-thaw cycles.

### Quality control:

- The size and purity of the protein has been confirmed by SDS-PAGE.
- hICOS-L-Fc has been validated by flow cytometry using Jurkat-Lucia™ hICOS cells, and by ELISA using an anti-hICOS-L monoclonal antibody. The potency of hICOS-L-Fc at triggering intracellular signaling has been validated using Jurkat-Lucia™-hICOS reporter cells
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and TLR4 cellular assays.

## PRODUCT DESCRIPTION

hICOS-L-Fc is a soluble human ICOS-L chimera protein generated by fusing the N-terminal extracellular domain of human ICOS-L (aa 19-256) to the N-terminus of a human IgG1 Fc domain with a cleavable TEV (Tobacco Etch Virus) sequence linker. Thus, depending on your applications, the IgG1 Fc domain can be removed using the TEV protease. hICOS-L-Fc has an apparent molecular weight of ~70 kDa on an SDS-PAGE gel. It is expressed in CHO cells and purified by protein G affinity chromatography.

## BACKGROUND

Inducible Co-Stimulator Ligand (ICOS-L, CD275) binds the immunostimulatory immune checkpoint ICOS (also known as CD278). ICOS-L is mostly expressed by antigen-presenting cells, while its receptor ICOS is rapidly induced in CD4<sup>+</sup> and CD8<sup>+</sup> T cells upon their activation<sup>1</sup>.

1. Amatore, F. *et al.* 2020. Role of ICOS in cancer immunotherapy. Expert Opin Biol Ther 20, 141-150.

## APPLICATIONS

hICOS-L-Fc can be used for:

- Screening of high-affinity anti-human ICOS-L monoclonal antibodies (mAbs) by ELISA
  - Screening of anti-human ICOS mAbs using competition assays.
- The optimal working concentration of hICOS-L-Fc must be determined empirically for a given set of experimental conditions.

## METHODS

### hICOS-L-Fc resuspension (100 µg/ml)

*Note: Ensure you see the lyophilized pellet before resuspension.*

- Add 500 µl of endotoxin-free water to the 50 µg vial and gently pipette until completely resuspended. Do not vortex.
- Prepare aliquots and store at -20°C or 4°C.

## RELATED PRODUCTS

Product	Cat. Code
Jurkat-Raji ICOS/ICOS-L assay	rajkt-hicos
Jurkat ICOS/ICOS-L assay	jktl-icos
hICOS-Fc	fc-hicos
Jurkat-Raji PD-1/PD-L1 assay	rajkt-hpd1
hPD1-Fc	fc-hpd1
hPD-L1-Fc	fc-hpd1

## TECHNICAL SUPPORT

InvivoGen USA (Toll-Free): 888-457-5873

InvivoGen USA (International): +1 (858) 457-5873

InvivoGen Europe: +33 (0) 5-62-71-69-39

InvivoGen Asia: +852 3622-3480

E-mail: [info@invivogen.com](mailto:info@invivogen.com)