

hICOS-Fc

Soluble human ICOS fused to an IgG1 Fc domain

Cat. code: fc-hicos

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

For research use only

Version 23L08-NJ

PRODUCT INFORMATION

Content:

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

Protein construction:

Codon-optimized human ICOS N-terminal extra-cellular domain [E21-F141] with a C-terminal human IgG1 Fc tag

Accession sequence: XP_047299978.1 (native sequence)

Species: Human

Source: CHO cells

Tag: C-terminal human IgG1 Fc

Total protein size: 365 a.a. (secreted form)

Molecular weight: ~ 47 kDa (SDS-PAGE)

Purification: Protein G affinity chromatography

Purity: >98% (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-Fc at -20°C. Lyophilized product is stable for at least 1 year.
- Reconstituted hICOS-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-Fc has been validated by flow cytometry using Raji-hICOS-L cells, and by ELISA using an anti-hICOS monoclonal antibody.
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and TLR4 cellular assays.

PRODUCT DESCRIPTION

hICOS-Fc is a soluble human ICOS chimera protein generated by fusing the N-terminal extracellular domain of human ICOS (aa 21-141) 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-Fc has an apparent molecular weight of ~47 kDa on an SDS-PAGE gel. It is expressed in CHO cells and purified by protein G affinity chromatography.

BACKGROUND

Inducible Co-Stimulator (ICOS, CD278) is an immunostimulatory immune checkpoint and a member of the CD28 superfamily. Expression of ICOS is rapidly induced in CD4⁺ and CD8⁺ T cells upon their activation, whereas its ligand ICOS-L (also known as CD275), is mostly expressed by antigen-presenting cells¹.

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

APPLICATIONS

hICOS-Fc can be used for:

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

METHODS

hICOS-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-L-Fc	fc-hicosl
Jurkat-Raji PD-1/PD-L1 assay	rajkt-hpd1
hPD1-Fc	fc-hpd1
hPD-L1-Fc	fc-hpd1l

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