



Recombinant Mouse ICOS Fc-Fusion Protein

Cat No: Pr00153-1.9

Product Summary

Description: Recombinant mouse ICOS Fc-Fusion Protein manufactured using [AbAb's Recombinant Platform](#)

Protein: Mouse ICOS

Fc domain: Mouse IgG1

Structure / Form: Disulfide-linked homodimer

Species: Mouse

Construct Design Note(s): The extracellular domain of ICOS has been fused to the Fc domain of mouse IgG1.

Host: HEK293

UniProt Accession Number: Q9WVS0

Alternative Description: AILIM; Activation-Inducible Lymphocyte Immunomediatory Molecule; CD278; CVID1; inducible T-cell co-stimulator

Published Application(s): Binding of ICOS to B7RP-1 has been observed using ACAS of transfected COS cells expressing membrane-bound ICOS incubated with the ECD of murine ICOS fused with human IgG1. This ICOS-Fc was used to detect cells from normal mice expressing B7RP-1 by FACS (Yoshinaga et al, 1999). It has been used to stain 293-MSR cells, using PE-conjugated F(ab')₂ goat anti-human Fcγ specific secondary followed by fixing and analysis by FACS (Arnett et al 2007). Murine ICOS fused with human IgG1 has also been used to treat mice infected with third stage *N. brasiliensis*, resulting in reduced numbers of Th2 and Th1 in WT BALB/c mice and CD28-deficient mice without an effect on CD8+ T cells (Kopf et al, 2000). However, use of ICOS-Fc for interference in mice failed to replicate the reduction in graft survival caused by blockade with ICOS mAb, so ICOS-Fc may not always be an effective blocking agent (Jens et al 2007). Human ICOS-Fc has been used in SPR to measure the affinity constants of mAbs for various antigens (Sakamoto et al, 2001).

Tested Applications(s): ELISA; SDS-PAGE

Activity: ICOS is a cell-surface costimulatory protein expressed on activated T cells. It enhances T-cell proliferation and other responses to foreign antigen, and is essential for efficient interaction between T and B-cells.

Reacts with antibody: anti-ICOS [7E.17G9] (Ab00814)

Product Form

Purification: Purified by affinity chromatography using Protein A.

Supplied in: PBS

Shipping: The product is shipped on blue ice. Upon receipt, store it immediately at the temperature recommended.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals

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Storage recommendation: Recommended storage at 4°C for up to 1 month. For longer term storage store at -20°C or -80°C in appropriate sized aliquots.

Fc-Fusion Sequence (monomer)

GEINGSADHRMFSFHNGGVQISCKYPETVQQLKMRLFRERREVLCELTCTKKGSGNAVSIKNPMLCLYHLSNNSVSFFLN
NPDSSQGSYYFCSLSIFDPPPFQERNLSSGGYLHIYESQLCCQLKLWGGGGSVPRDQGCKPCICTVPEVSSVFIFPPKP
KDLTITLTPKVTCVVVDISKDDPEVQFSWFVDDVEVHTAQTTPREEQINSTFRSVSELPIMHQDWLNGKEFKCRVNSA
AFPAPIEKTISKTKGRPKAPQVYTIPPPKEQMAKDKVSLTCMITNFFPEDITVEWQWNGQPAENYKNTQPIMDTDGSYF
VYSKLVQKSNWEAGNTFTCSVLHEGLHNHHTKSLSHSPGKHHHHHH

Underlined amino acids sequence include a G4S linker and 6xHis epitope tag, respectively.

Calculated Molecular weight (dimer): 81703 Da

Extinction coefficient: 97900 (calculation performed as described by Pace *et al.* (1995), PMID: 8563639).

Representative Analysis and Activity Data

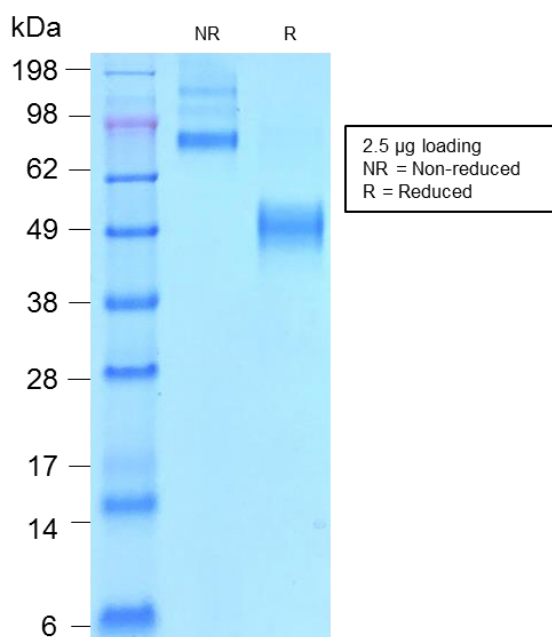
Lot no: T1728A05

Concentration: 1 mg/ml

Endotoxin level: <1 EU/mg as determined by LAL chromogenic endotoxin assay

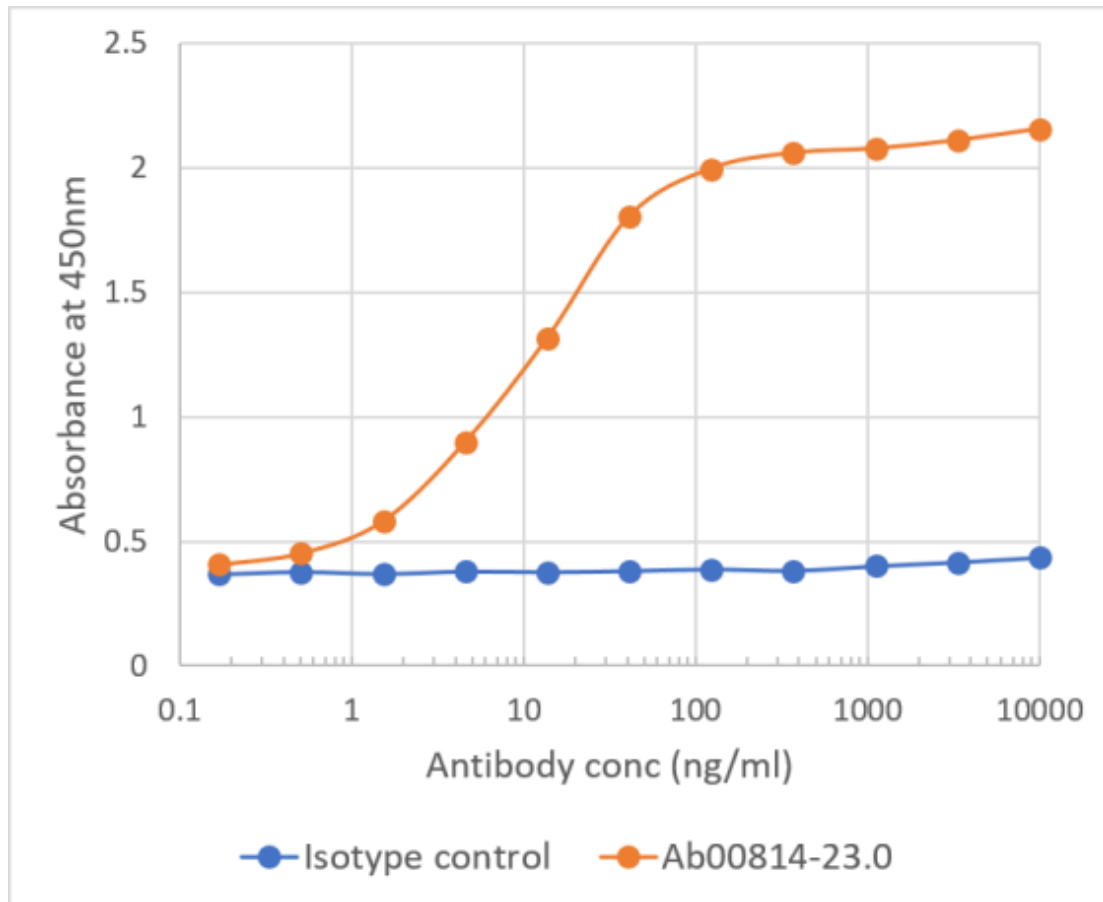
SDS PAGE Purity: >98%

SDS-PAGE gel image:



Pr00153-1.9 under non-reducing and reducing (DTT) conditions resolved by SDS-PAGE and stained using Coomassie-Blue.

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ELISA:

Binding curve of anti-ICOS antibody 7E.17G9 (Ab00814-23.0) to mouse ICOS-Fc fusion protein. ELISA Plate coated with mouse ICOS-Fc fusion protein (Pr00153-1.9) at a concentration of 5 μ g/ml. A 3-fold serial dilution from 10,000 to 0.1 ng/ml was performed using Ab00814-23.0. For detection, a 1:4000 dilution of HRP-labelled goat anti-rabbit antibody (Bio-Rad) was used.

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