

Product Data Sheet

anti-human Inducible co-stimulator ligand (ICOSL) monoclonal antibody

Product information

Catalog Number:	GM-0301
Clone:	GM-13C1
Description:	purified monoclonal mouse antibody
Specificity:	anti-human Inducible co-stimulator ligand (ICOSL)
Isotype:	IgG1
Purification:	Protein G
Storage:	short term: 2°C - 8°C; long term: -20°C (avoid repeated freezing and thawing)
Buffer :	phosphate buffered saline, pH 7.2
Immunogen:	genetic immunisation with cDNA encoding human ICOSL (extracellular domain)
Selection:	based on recognition of the complete native protein expressed on transfected mammalian cells

Working dilutions

Flow cytometry:	1.2 µg/10 ⁶ cells
CELISA:	1:200 - 1:400

For each application a titration should be performed to determine the optimal concentration.

Specificity testing by flow cytometry

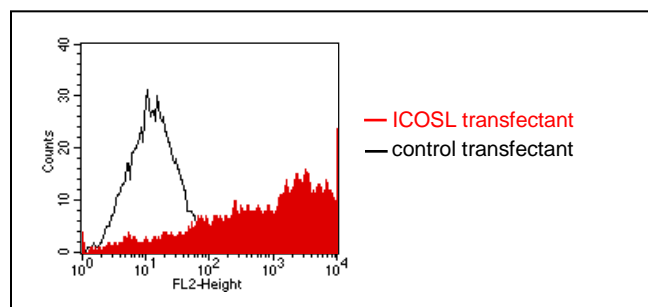


Fig.1: FACS analysis of BOSC23 cells using GM-13C1 Cat.# GM-0301. BOSC23 cells were transiently transfected with an expression vector encoding either ICOSL (red curve) or an irrelevant protein (control transfectant: black curve). Binding of GM-13C1 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with ICOSL transfected cells.

SDS-PAGE analysis of GM-13C1

The antibody was purified by protein G affinity chromatography from cell culture supernatants and verified by SDS-Page (Fig.2).

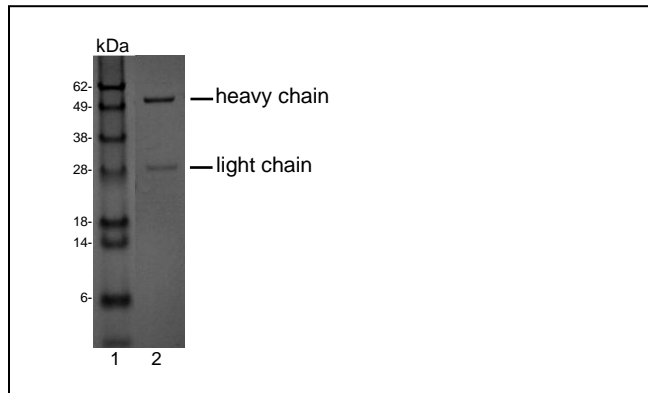


Fig.2: SDS-PAGE analysis of purified GM-13C1 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 µg of purified GM-13C1 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent.

Background

Inducible co-stimulator ligand (ICOSL) is a specific ligand on antigen-presenting cells and cells of the peripheral tissue that binds to the inducible co-stimulator receptor (ICOS)(1). ICOS belongs to the CD28/CD152 receptor family that regulates T-cell activation and function. ICOSL is expressed on monocytes, dendritic cells and B cells and can be induced by inflammatory stimuli in peripheral tissue. Binding to ICOSL delivers a co-stimulatory signal for T cell proliferation and cytokine secretion (2,3).

References

1. **Richter G, Hayden-Ledbetter M, Irgang M, Ledbetter JA, Westermann J, Korner I, Daemen K, Clark EA, Aicher A and Pezzutto A (2001).** Tumor Necrosis Factor- α Regulates the Expression of Inducible Costimulator Receptor Ligand on CD34+ Progenitor Cells during Differentiation into Antigen Presenting Cells. *J Biol Chem* 276: 45686-45693.
2. **Richter G and Burdach S (2004).** ICOS: a new costimulatory ligand/receptor pair and its role in T-cell activation. *Onkologie* 27(1): 91-5
3. **Aicher A, Hayden-Ledbetter M, Brady WA, Pezzutto A, Richer G, Magaletti D, Buckwalter S, Ledbetter JA and Clark EA (2000).** Characterization of human inducible costimulator ligand expression and function. *J Immunol* 1;164(9):4689-96