

ICOS (27A12): sc-53028

BACKGROUND

T cell proliferation and lymphokine production are triggered by occupation of the TCR by antigen, followed by a costimulatory signal that is delivered by a ligand expressed on antigen presenting cells. The B7-related cell surface proteins CD80 (B7-1) and CD86 (B7-2) are expressed on antigen presenting cells. CD80 and CD86 bind to the homologous T cell receptors CD28 and CTLA-4 (cytotoxic T lymphocyte-associated protein-4) and trigger costimulatory signals for optimal T cell activation. CTLA-4 shares 31% overall amino acid identity with CD28 and it has been proposed that CD28 and CTLA-4 are functionally redundant. ICOS (inducible co-stimulator) is related to CD28 and CTLA-4, and these three proteins are thought to compose a receptor family. ICOS stimulation enhances T cell responses and superinduces the synthesis of IL-10, but it does not induce IL-2 upregulation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Icos (mouse) mapping to 1 C2.

SOURCE

ICOS (27A12) is a Syrian hamster monoclonal antibody raised against the extracellular domain of ICOS of mouse origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ICOS (27A12) is available conjugated to either phycoerythrin (sc-53028 PE) or fluorescein (sc-53028 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

ICOS (27A12) is recommended for detection of ICOS of mouse origin by flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for ICOS siRNA (m): sc-42771, ICOS shRNA Plasmid (m): sc-42771-SH and ICOS shRNA (m) Lentiviral Particles: sc-42771-V.

Molecular Weight of ICOS monomer: 27 kDa.

Molecular Weight of ICOS homodimer: 55-60 kDa.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.