Technical Data Sheet
Purified Mouse Anti-Human CD278

Product Information
Material Number: 557801
Alternate Name: ICOS
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: DX29
Immunogen: Activated human T cells
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
Monoclonal antibody DX29 reacts with inducible costimulatory (ICOS) molecule. ICOS is a homodimeric membrane glycoprotein, member of the CD28 family, of approximately 50 - 60 kDa, highly expressed on activated T cells. It is the receptor for B7 related protein 1 (B7RP-1) and also, like CD28, ICOS is costimulatory signal for T cell activation, proliferation and cytokine production. It is not expressed on resting or activated B cells, monocytes, NK cells, granulocytes, dendritic cells or platelets. Unlike the constitutively expressed CD28, ICOS expression is de novo. Reports describe similarities of CD28 and ICOS in T cell activation, however, it has been suggested that ICOS may play an important role in IL-10 production. In presence IL-10, purified recombinant human ICOS significantly increased in vitro B cell growth stimulated by pokeweed mitogen (PWM) and enhanced production of IgG.

Preparation and Storage
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4° C.

Application Notes
Application
Flow cytometry Routinely Tested

Profile of ICOS (DX29) reactivity on PHA-stimulated peripheral blood mononuclear cells analyzed by flow cytometry. Second step staining with Cat. No. 555988.
Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
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<tbody>
<tr>
<td>555746</td>
<td>Purified Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
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<tr>
<td>555988</td>
<td>FITC Goat Anti-Mouse IgG/IgM</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to wwwbdbiosciencescom/pharminenprotocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References


Dong C, Nurieva RI. Regulation of immune and autoimmune responses by ICOS. *J Autoimmun.* 2003; 21(3):255-260 (Biology)
