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ProductInformation

MONOCLONAL ANTI-HUMAN CD152 (CTLA-4)
CLONE AS32
Purified Mouse Immunoglobulin

Product Number **C 9979**

Product Description

Monoclonal Anti-Human CD152 (CTLA-4) (mouse IgG1 isotype) is produced by immunizing mice with purified recombinant extracellular domain of human CD152.[1] The antibody is purified from tissue culture supernatant using Protein G affinity chromatography.

Monoclonal Anti-Human CD152 (CTLA-4) recognizes the extracellular domain of human CD152 by neutralization.

CD152 and CD28, structurally similar molecules, are members of the immunoglobin (Ig) gene superfamily. They are composed of a single Ig V-like extracellular domain, a transmembrnne domain, and an intracellular domain. CD152, a cell surface glycoprotein, was originally identified as a gene that was specifically expressed by cytotoxic T lymphocytes. However, CD152 transcripts have since been found in both Th1 and Th2, and CD4+ and CD8+ T cell clones.

CD152 (CTLA-4) and CD28 are receptors for the ligands, CD80 (B7-1) and CD86 (B7-2).[2, 3] CD152 and CD28 together with their ligands constitute one of the dominant co-stimulatory pathways that regulate T- and B-cell responses. CD152 acts as a co-stimulatory molecule in eliciting T cell help during antigen presentation and functions as a negative regulator of T cell activation.[4, 5]

CD152 is expressed on most T lymphocytes. The level of expression is activation-dependent.[6]
The genes encoding human CD152 and CD28 are closely linked on chromosome 2.

Reagent

Monoclonal Anti-Human CD152 (CTLA-4) is supplied as 1.0 mg/ml of antiserum in phosphate buffered saline, containing 0.08 % sodium azide.

Storage/Stability

Store at 2 °C to 8 °C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Product Profile

For neutralization studies, this antibody has been shown to block the interaction of soluble human CD152 with human CD80.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentrations by titration test.

References

1. Harper, K., et al., J. Immunol. **147**, 1037 (1991).
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5. Walunas, T.L., et al., Immunity, **1**, 405 (1994).
6. Lindsten, T., et al. J. Immunol., **151**, 3489 (1993).

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