

Anti-Mouse CD80 (B7-1) Antibody, Clone 16-10A1, APC

Hamster (Armenian) monoclonal antibody against mouse CD80 (B7-1), APC-conjugated

Catalog #100-1624

100 µg

0.2 mg/mL

Product Description

This monoclonal antibody reacts with mouse cluster of differentiation 80 (CD80), a 55 kDa type I transmembrane protein ligand that is part of the immunoglobulin superfamily. CD80 is expressed by macrophages, dendritic cells, and activated B cells. CD80 is closely related to and works in tandem with CD86 (B7-2) to prime T cells. It has high affinity for binding to two T cell surface antigens, CD28 and CD152 (CTLA-4), and can deliver an inhibitory signal to T cells. CD80 is significantly involved in immune cell activation in response to pathogens and acts as a cellular attachment receptor for adenovirus subgroup B. It is thought that CD80 interacts with a ligand on natural killer cells thus activating the natural killer cell-mediated cell death of the CD80 carrier. This phenomenon has potential as a possible cancer immunotherapy through the induction of CD80 expression on tumor cells. This antibody can be used as a marker to assess classically activated M1 murine macrophages.

Target Antigen:	CD80 (B7-1)
Alternative Names:	B7, B7-1, Cd28l, Ly-53, MIC17, TSA1
Gene ID:	12519
Species Reactivity:	Mouse
Host Species:	Hamster
Clonality:	Monoclonal
Clone:	16-10A1
Isotype:	Armenian hamster IgG
Immunogen:	CHO cell line transfected with mouse B7 (CD80)
Conjugate:	APC (Allophycocyanin)

Applications

Verified Applications: FC

Reported Applications: FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; FCXM: Flow cytometric crossmatch assay; FISH: Fluorescence in situ hybridization; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-F: Immunohistochemistry (frozen-tissue); IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; NMR: Nuclear magnetic resonance spectroscopy; RIA: Radioimmunoassay; WB: Western blotting

Properties

Product Formulation: Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin

Purification: The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.

Directions for Use: For flow cytometry, the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 μL . It is recommended that the antibody be titrated for optimal performance for each application.

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

References

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