



Rat Anti-Mouse CD19 Monoclonal antibody, clone 1D3 (CABT-L4432)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The 1D3 monoclonal antibody reacts with mouse CD19, a B cell-specific 95 kDa transmembrane glycoprotein of the immunoglobulin superfamily.
Target	Mouse CD19
Immunogen	K562 cells expressing the extracellular domain of mouse CD19
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	1D3
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo B cell depletion, in vivo CD19 neutralization, in vitro B cell negative selection, FC
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]

Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay
Related dilution buffer: CABT-LB04

Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction

The 1D3 monoclonal antibody reacts with mouse CD19, a B cell-specific 95 kDa transmembrane glycoprotein of the immunoglobulin superfamily. CD19 contains two extracellular immunoglobulin-like domains and an extensive cytoplasmic tail. It functions as a positive regulator of B-cell receptor signaling in conjunction with CD21 and CD81. CD19 is highly expressed in most lymphomas and leukemias including some early B-cell malignancies that do not express CD20. For these reasons CD19 is quickly becoming an attractive alternative target for the immunotherapy of lymphoproliferative disorders. The 1D3 antibody has been reported to deplete B cells however, B cell depletion often requires treatment with a combination of 1D3, anti-mouse B220 (clone RA3.3A1/6.1), anti-mouse CD22 (clone Cy34.1), and anti-rat κ light chain (clone MAR 18.5) antibodies. Please see the provided references for protocol details.

Keywords CD19;CD19 antigen;AW495831;B-lymphocyte antigen CD19;differentiation antigen CD19;

GENE INFORMATION

Official Symbol	CD19 antigen
Synonyms	CD19; CD19 antigen; AW495831; B-lymphocyte antigen CD19; differentiation antigen CD19;
References	Sawen, P., et al. (2016). "Mitotic History Reveals Distinct Stem Cell Populations and Their Contributions to Hematopoiesis." Cell Rep 14(12): 2809-2818. PubMed;