



Rat Anti-Mouse CD1d (CD1.1) Monoclonal antibody, clone 20H2 (HB323) (CABT-L4455)

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

PRODUCT INFORMATION

Product Overview

The 20H2 monoclonal antibody reacts with mouse CD1d also known as CD1.1. CD1d is a 48 kDa type I membrane glycoprotein and a member of the CD1 family of glycoproteins. CD1d is a non-classical MHC protein with structural homology to class I MHC molecules. CD1d is expressed on the surface of various antigen-presenting cells and is involved in the presentation of non-peptide glycolipid antigens to CD1d-restricted T cells. CD1d-presented glycolipid antigens activate invariant natural killer T (iNKT) cells, through the interaction with the T-cell receptor present on iNKT cell membranes. When activated, iNKT cells rapidly produce Th1 and Th2 cytokines.

Target	Mouse CD1d (CD1.1)
Immunogen	CD1.1-transfected rat cell line RBL-CD1.1 followed by CD1.1-transfected human cell line CR1-CD1.1
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	20H2 (HB323)
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	iNKT cell neutralization, in vivo CD1d blockade, 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	Antigen-presenting protein that binds self and non-self glycolipids and presents them to T-cell receptors on natural killer T-cells.
Keywords	CD1D;CD1d molecule;CD1d antigen;CD1D antigen, d polypeptide;antigen-presenting glycoprotein CD1d;R3G1;thymocyte antigen CD1D;CD1D antigen, d polypeptide;T-cell surface glycoprotein CD1d;differentiation antigen CD1-alpha-3;HMC class I antigen-like glycoprotein CD1D;R3;CD1A;MGC34622;

GENE INFORMATION

Official Symbol	CD1d molecule
Synonyms	CD1D; CD1d molecule; CD1d antigen; CD1D antigen, d polypeptide; antigen-presenting glycoprotein CD1d; R3G1; thymocyte antigen CD1D; CD1D antigen, d polypeptide; T-cell surface glycoprotein CD1d; differentiation antigen CD1-alpha-3; HMC class I antigen-like glycoprotein CD1D; R3; CD1A; MGC34622;
References	Pilonis, K. A., et al. (2014). "Invariant natural killer T cells regulate anti-tumor immunity by controlling the population of dendritic cells in tumor and draining lymph nodes." J Immunother Cancer 2(1): 37. PubMed;