

## ARG23174 anti-CD1d antibody [WTH1]

Package: 100 µg  
Store at: -20°C

### Summary

<b>Product Description</b>	Mouse Monoclonal antibody [WTH1] recognizes CD1d Mouse anti Rat CD1d antibody, clone WTH1 recognizes rat CD1d, a glycoprotein expressed on cortical thymocytes, certain T-cell leukaemias and various other antigen presenting cells. CD1d binds self and non-self glycolipids and presents them to T-cell receptors on natural killer cells. When activated, natural killer cells produce Th1 and Th2 cytokines. Clone WTH1 recognizes a different, non-overlapping epitope to clone WTH2 and binds with high affinity to the mature CD1d heavy chain independently of beta-2-microglobulin. Mouse anti Rat CD1d antibody, clone WTH1 efficiently blocks rat and mouse invariant natural killer T cell (iNKT cell) response to a-GalCer (an antigen for iNKT cells) and has a slightly higher affinity to native CD1d than clone WTH2. Clone WTH1 cross reacts weakly with mouse tissue in IHC and western blotting, but reacts strongly with both rat and mouse antigens in flow cytometry and immunoprecipitation.
<b>Tested Reactivity</b>	Ms, Rat
<b>Tested Application</b>	ELISA, FACS, FuncSt, IHC-Fr, IP, WB
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	WTH1
<b>Isotype</b>	IgG2a
<b>Target Name</b>	CD1d
<b>Species</b>	Rat
<b>Immunogen</b>	Rat CD1d-transduced M12.4.1.C3 cells.
<b>Conjugation</b>	Un-conjugated
<b>Alternate Names</b>	CD antigen CD1d; CD1A; R3G1; Antigen-presenting glycoprotein CD1d; R3

### Application Instructions

<b>Application table</b>	Application	Dilution
	ELISA	Assay-dependent
	FACS	1:2000
	FuncSt	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent

**Application Note**

FuncSt: This antibody contains sodium azide, removal by dialysis is recommended prior to use in functional assays.

WB: Clone WTH1 recognizes CD1d under non-reducing conditions.

FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.

\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

## Properties

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Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

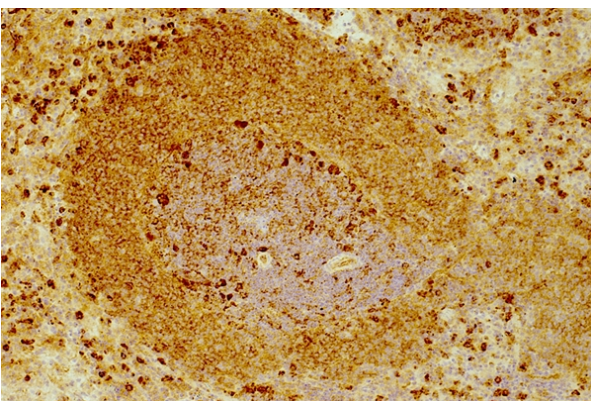
## Bioinformation

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Gene Symbol	Cd1d1
Gene Full Name	CD1d1 antigen
Background	This gene encodes a divergent member of the CD1 family of transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. The CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. The human genome contains five CD1 family genes organized in a cluster on chromosome 1. The CD1 family members are thought to differ in their cellular localization and specificity for particular lipid ligands. The protein encoded by this gene localizes to late endosomes and lysosomes via a tyrosine-based motif in the cytoplasmic tail. [provided by RefSeq, Jul 2008]
Function	Antigen-presenting protein that binds self and non-self glycolipids and presents them to T-cell receptors on natural killer T-cells. [UniProt]
Calculated Mw	38 kDa

## Images

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ARG23174 anti-CD1d antibody [WTH1] IHC-Fr image

Immunohistochemistry: Immunoperoxidase staining of LEW Rat spleen follicle with ARG23174 anti-CD1d antibody [WTH1].