

## Technical Data Sheet

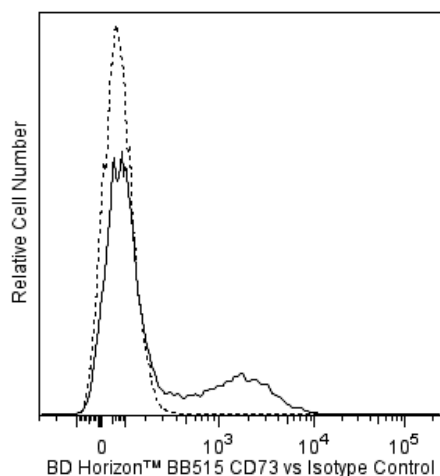
**BB515 Mouse Anti-Human CD73****Product Information**

<b>Material Number:</b>	<b>565110</b>
<b>Alternate Name:</b>	NT5E; 5' nucleotidase; 5'-NT; E5NT; Ecto-5'-nucleotidase; eN; eNT; NT; NT5
<b>Size:</b>	100 Tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	AD2
<b>Immunogen:</b>	Pre-B leukemia cell line
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	V B-CD73.3
<b>Storage Buffer:</b>	Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**

The AD2 monoclonal antibody specifically binds to ecto-5'-nucleotidase, a 70 kDa, glycosyl phosphatidylinositol (GPI)-anchored glycoprotein. CD73 is expressed on subsets of T and B lymphocytes, follicular dendritic cells, epithelial cells, endothelial cells and mesenchymal stem cells. Its expression on lymphocytes increases during T and B cell development. CD73 has enzymatic activity and catalyzes the dephosphorylation of adenosine monophosphate (AMP) converting it to adenosine. It has been suggested that CD73 can mediate costimulatory signals in T cell activation and adhesion of lymphocytes to endothelium.

The antibody was conjugated to BD Horizon BB515 which was developed exclusively by BD Biosciences. With an excitation max of 490 nm and an emission max of 515 nm, BD Horizon BB515 can be excited by the 488 nm laser and detected in a standard FITC set (e.g. 530/30-nm filter). This dye provides a much brighter alternative to FITC with less spillover into the PE detector.



**Flow cytometric analysis of CD73 expression on human peripheral blood lymphocytes.** Human whole blood was stained with either BD Horizon BB515 Mouse IgG1, κ Isotype Control (Cat. No. 564416; dashed line histogram) or BD Horizon™ BB515 Mouse Anti-Human CD73 antibody (Cat. No. 565110; solid line histogram). The fluorescence histogram showing CD73 expression (or Ig Isotype control staining) was derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.

**Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ BB515 under optimum conditions and unconjugated antibody was removed.

**Application Notes****Application**

Flow cytometry

Routinely Tested

**Recommended Assay Procedure:**

For optimal results, it is recommended to perform 2 washes after staining with antibodies. Cells may be prepared, stained with antibodies and washed twice with wash buffer per established protocols for immunofluorescent staining, prior to acquisition on a flow cytometer. Performing fewer than the recommended wash steps may lead to increased spread of the negative population.

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## Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
563794	Brilliant Stain Buffer	5 mL	(none)
564416	BB515 Mouse IgG1, $\kappa$ Isotype Control	100 $\mu$ g	X40
349202	BD FACSTM Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)

## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. The manufacture, use, sale, offer for sale, or import of this product is subject to one or more patents or pending applications. This product, and only in the amount purchased by buyer, may be used solely for buyer's own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. Diagnostic uses require a separate license.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
6. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

## References

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- Nakamura T, Kubagawa H, Ohno T, Cooper MD. Characterization of an IgM Fc-binding receptor on human T cells. *J Immunol.* 1993; 151(12):6933-6941. (Clone-specific)
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