

Technical Data Sheet

APC-R700 Mouse Anti-Human CD13

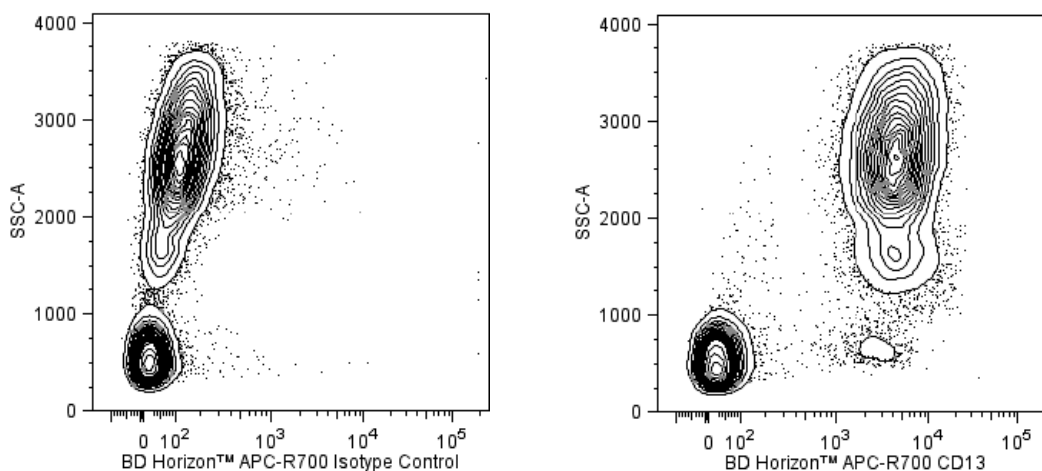
Product Information

Material Number:	565124
Alternate Name:	ANPEP; APN; Aminopeptidase N; Alanyl aminopeptidase; LAP1; PEPN
Size:	100 Tests
Vol. per Test:	5 µl
Clone:	WM15
Immunogen:	Human AML Cells
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV M44, M209
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, glycerol and ≤0.09% sodium azide.

Description

The WM15 monoclonal antibody specifically binds to CD13, the 150 kDa Type II integral membrane glycoprotein which is also known as aminopeptidase N. The CD13 antigen is the receptor for human coronavirus 229E, the causative agent for some cases of upper respiratory infection. This antibody binds to GM-progenitor cells, granulocytic and monocytic cells, and mast cells, but not to lymphocytes, platelets or erythrocytes. Aminopeptidase N is involved in the metabolism of many regulatory peptides.

This antibody was conjugated to BD Horizon APC-R700, which has been developed exclusively by BD Biosciences as a better alternative to Alexa Fluor® 700. APC-R700 excites and emits at similar wavelengths to Alexa Fluor® 700 yet exhibits significantly improved brightness. This dye can be excited by the red laser and detected with the same filter set as Alexa Fluor® (eg, 730/45-nm filter).



Multiparameter flow cytometric analysis of CD13 expression on human peripheral blood leucocytes. Human whole blood was stained with either BD Horizon™ APC-R700 Mouse IgG1, κ Isotype Control (Cat. No. 564974; Left Panel) or BD Horizon APC-R700 Mouse Anti-Human CD13 antibody (Cat. No. 565124; Right Panel). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Two-parameter flow cytometric contour plots showing the correlated expression of CD13 (or Ig Isotype control staining) versus side light-scatter signals (SSC-A) were derived from gated events with the forward and side light-scatter characteristics of intact leucocyte populations. 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 to the dye under optimum conditions and unconjugated antibody and free dye were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cells and CompBead to ensure that BD Comp beads are appropriate for your specific cellular application.

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
564974	APC-R700 Mouse IgG1, κ Isotype Control	0.1 mg	X40
349202	Lysing Solution 10X Concentrate	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 1×10^6 cells in a 100-μl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
8. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

References

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