

Technical Data Sheet

BV786 Mouse Anti-Human CD203c

Product Information

Material Number:	744244
Size:	50 µg
Clone:	NP4D6
Alternative Name:	ENPP3; E-NPP 3; NPP3; PDNP3; PD-Ibeta; PD-1β; B10; NPPase; gp130RB13-6
Reactivity:	Tested in Development:Human
Isotype:	Mouse BALB/c IgG1, κ
Immunogen:	Human CD203c Transfected Cell Line
Application:	Flow cytometry(Qualified)
Concentration:	0.2 mg/ml
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The NP4D6 monoclonal antibody specifically binds to CD203c. CD203c is a type II transmembrane glycoprotein that is a member of the E-NNP family of ectoenzymes. CD203c is also known as ectonucleotide pyrophosphatase/phosphodiesterase 3 (E-NPP3, ENPP3) due to its capacity to hydrolyze phosphodiester and phosphosulfate bonds in a variety of molecules including deoxynucleotides, nucleoside phosphates, and nicotinamide adenine dinucleotide. CD203c is otherwise known as Phosphodiesterase-1β (PD-1β, PD-I beta), B10, or gp130RB13-6. CD203c is expressed by basophils and mast cells. Basophils increase CD203c expression following activation with allergens or antibodies that crosslink cytophilic IgE. Thus, CD203c serves as a useful flow cytometric marker for basophil activation and the detection and analysis of type 1 allergic responses. IgE-receptor cross-linking results in CD203c upregulation and overexpression on neoplastic mast cells in cases of systemic mastocytosis.

The antibody was conjugated to BD Horizon™ BV786 which is part of the BD Horizon Brilliant™ Violet family of dyes. This dye is a tandem fluorochrome of BD Horizon BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 786-nm. BD Horizon BV786 can be excited by the violet laser and detected in a filter used to detect Cy™7-like dyes (eg, 780/60-nm filter).

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 BV786 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

Suggested Companion Products

Catalog Number	Name	Size	Clone
564219	Human BD Fc Block™	50 µg	Fc1
554656	Stain Buffer (FBS)	500 mL	
554657	Stain Buffer (BSA)	500 mL	
563794	Brilliant Stain Buffer	100 Tests	
349202	Lysing Solution 10X Concentrate	100 mL	
555899	Lysing Buffer	100 mL	

Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. An isotype control should be used at the same concentration as the antibody of interest.
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 www.bdbiosciences.com/us/s/resources for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant Violet 786 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; 8,354,239.
10. Cy is a trademark of GE Healthcare.

References

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