Technical Data Sheet

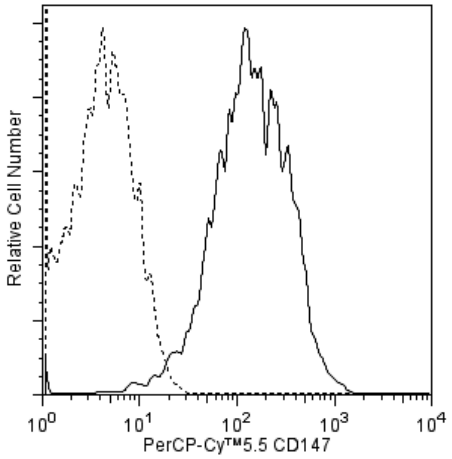
PerCP-Cy™5.5 Mouse Anti-Human CD147

Product Information

Material Number:	**562554**
Alternate Name:	BSG; Basigin; BASI; Neurothelin; 5F7; EMMPRIN; M6; OK; TCSF
Size:	50 tests
Vol. per Test:	5 µl
Clone:	HIM6
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI NL109
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HIM6 monoclonal antibody specifically binds to CD147 which is encoded by BSG. CD147 is a type I transmembrane glycoprotein (30-50 kDa) of the immunoglobulin super-gene family. Neurothelin, a blood-brain barrier-specific molecule, was clustered as CD147 in the Sixth Human Leukocyte Differentiation Antigen (HLDA) workshop. It bears homology with mouse gp42 or basigin, human "M6" or "EMMPRIN", rat OX-47 or CD-9, and avian HT7 or 5A11. CD147 is also known as Tumor cell-derived collagenase stimulatory factor (TCSF). CD147 is a molecule that is broadly expressed on cells of hematopoietic and non-hematopoietic origin. Its expression on specific cell types may be regulated by cytokines. CD147 plays a role in embryonal blood-brain barrier development and a role in integrin-mediated adhesion in brain endothelia.



Flow cytometric analysis of CD147 expression on human peripheral blood lymphocytes. *Whole blood was stained with PerCP-Cy™5.5 Mouse Anti-Human CD147 antibody (Cat. No. 562554; solid line histogram), or with a PerCP-Cy™5.5 Mouse IgG1, κ Isotype Control (Cat. No. 550795; dashed line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry 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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
550795	PerCP-Cy™5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

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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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. 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.
7. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
8. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
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11. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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