

## Technical Data Sheet

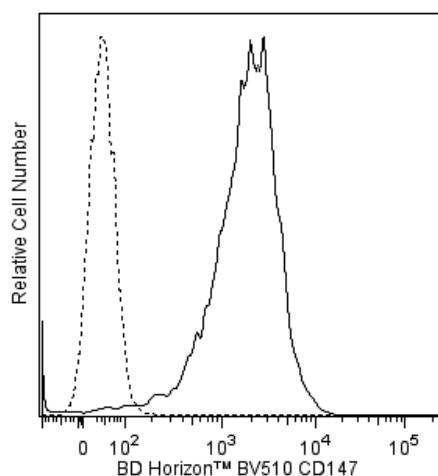
**BV510 Mouse Anti-Human CD147****Product Information**

<b>Material Number:</b>	<b>563249</b>
<b>Alternate Name:</b>	BSG; Basigin; Basi; Neurothelin; 5F7; EMMPRIN; M6; OK; TCSF
<b>Size:</b>	50 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	HIM6
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	VI NL109
<b>Storage Buffer:</b>	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.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



**Flow cytometric analysis of CD147 expression on human peripheral blood lymphocytes.** Whole blood was stained with BD Horizon™ BV510 Mouse Anti-Human CD147 antibody (Cat. No. 563249; solid line histogram) or with a BD Horizon™ BV510 Mouse IgG1, κ Isotype Control (Cat. No. 562946; 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 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™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

**Application Notes****Application**

Flow cytometry	Routinely Tested
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**Suggested Companion Products**

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562946	BV510 Mouse IgG1, κ Isotype Control	50 µg	X40
555899	Lysing Buffer	100 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  $1 \times 10^6$  cells in a 100- $\mu$ l 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. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
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](http://www.bdbiosciences.com/colors).
7. Brilliant Violet™ 510 is a trademark of Sirigen.

## References

Majdic O, Pickl WF, Kohl P, Stockinger H, Knapp W. EC16.3 CD147 Workshop: Reactivity and epitope mapping of CD147 monoclonal antibodies. In: Kishimoto T, Kikutani H, von dem Borne AEGK, ed. *Leukocyte Typing VI: White Cell Differentiation Antigens*. New York: Garland Publishing Inc; 1998:765-766. (Clone-specific: Flow cytometry)

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