# Technical Data Sheet

# BV786 Mouse Anti-Human CD196 (CCR6)

#### **Product Information**

**Material Number:** 563704

Alternate Name: BN-1; C-C chemokine receptor type 6; C-C CKR-6; CC-CKR-6; CCR-6; CD196

Size Vol. per Test: 5 μl 11A9 Clone:

Human CD196/CCR6 Peptide Immunogen:

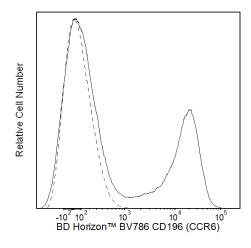
Isotype: Mouse IgG1, κ Reactivity: QC Testing: Human HLDA VII Workshop:

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The 11A9 monoclonal antibody specifically binds to CCR6. CCR6 is a seven-transmembrane, G-protein-coupled, glycoprotein receptor that is a member of the beta chemokine receptor family. CCR6 was clustered as CD196 in the 7th HLDA Workshop. The human CCR6 gene has been mapped to chromosome 6q27. CCR6 is a receptor for the CC chemokine CCL20/MIP-3alpha/LARC/Exodus and also binds with lower affinity to and mediates responses to beta-defensin2/hBD-2. CCR6 is predominantly expressed by B lymphocytes, certain subsets of effector and memory T cells and by immature dendritic cells but not by monocytes, NK cells, or granulocytyes. Skin-homing CLA (Cutaneous Lymphocyte Antigen)-positive memory T cells, Th1 cells, regulatory T cells and IL-17A-producing Th17 cells predominantly express high levels of CCR6. CCR6 mediates the trafficking of T, B, and dendritic cells to epithelial sites near the skin and mucosal surfaces during inflammatory and immunological responses. An N-terminal peptide of human CCR6 was used as an immunogen to generate the 11A9 hybridoma. The 11A9 antibody does not cross-react with human CCR1, CCR2, CCR3, CCR4, CCR5, CCR7, CCR8, CCR9, CXCR1, CXCR2, CXCR3, CXCR4 and CXCR5 receptors. This antibody is NOT a neutralizing antibody.

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<sup>TM</sup>7-like dyes (eg, 780/60-nm filter).



Flow cytometric analysis of CD196 (CCR6) expression on human peripheral blood cells. Human whole blood was stained with either BD Horizon™ BV786 Mouse Anti-Human CD196 (CCR6) antibody (Cat. No. 563704; solid line histogram) or with BD Horizon™ BV786 Mouse IgG1, κ Isotype Control (Cat. No. 563330; dashed line histogram) The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from 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<sup>TM</sup> BV786 under optimum conditions, and unconjugated antibody and free BD Horizon<sup>TM</sup> BV786 were removed.

### **Application Notes**

Application

Flow cytometry Routinely Tested

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### Suggested Companion Products

Catalog Number	Name Name	Size	Clone	
554656	Stain Buffer (FBS)	500 ml	(none)	
563330	BV786 Mouse IgG1, k Isotype Control	50 μg	X40	
555899	Lysing Buffer	100 ml	(none)	

#### **Product Notices**

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> 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.
- 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- Cy is a trademark of Amersham Biosciences Limited.
- Brilliant Violet<sup>TM</sup> 421 is a trademark of Sirigen.
- 7. Brilliant Violet<sup>TM</sup> 786 is a trademark of Sirigen.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 9. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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