Technical Data Sheet

BV786 Mouse Anti-Human CD279 (PD-1)

Product Information

Material Number: 563789
Alternate Name: hPD-1; PD1; PDCD1; Programmed cell death 1; SLEB2
Size: 50 tests
Vol. per Test: 5 µl
Clone: EH12.1 (also known as EH12)
Immunogen: Human PD-1 Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human

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

Description

The EH12.1 monoclonal antibody specifically binds to CD279. CD279 is an immunoregulatory receptor that is expressed on activated T cells, B cells and myeloid cells and contains an immunoreceptor tyrosine-based inhibitory motif (ITIM) in the cytoplasmic region. Mice deficient in CD279 show a breakdown of peripheral tolerance and manifest multiple autoimmune symptoms. PD-L1 and PD-L2 are ligands of CD279 and are members of the B7 gene family. Interaction of CD279:PD-Ligands results in inhibition of T cell proliferation and cytokine secretion. Reports suggest that the B7/CTLA-4 pathway functions primarily to attenuate, limit, and/or terminate naïve T-cell activation in secondary lymphoid organs. The PD-ligand:CD279 pathway, on the other hand, may primarily attenuate, limit, and/or terminate T-, B-, and myeloid cell activation/effector function at sites of inflammation in the periphery.

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 Cy7™-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 optimum conditions, and unconjugated antibody and free BD Horizon™ BV786 were removed.
Application Notes

Flow cytometry Routinely Tested

Suggested Companion Products

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<th>Name</th>
<th>Size</th>
<th>Clone</th>
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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. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
5. Cy is a trademark of Amersham Biosciences Limited.
6. Brilliant Violet™ 421 is a trademark of Sirigen.
7. Brilliant Violet™ 786 is a trademark of Sirigen.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References