

## Technical Data Sheet

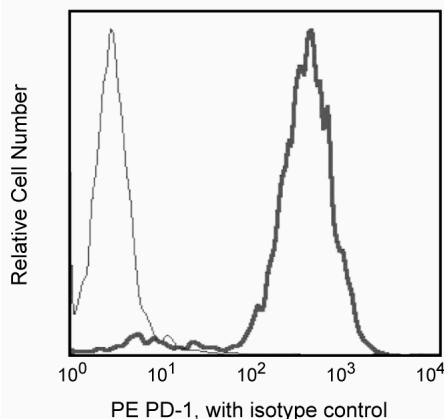
## PE Mouse Anti-Human CD279

## Product Information

|                  |   |
|------------------|---|
| Material Number: | 560908  |
| Alternate Name:  | PD-1  |
| Size:            | 25 tests  |
| Vol. per Test:   | 20 µl   |
| Clone:           | MIH4  |
| Isotype:         | Mouse IgG1, κ   |
| Reactivity:      | QC Testing: Human   |
| Storage Buffer:  | Aqueous buffered solution containing BSA and ≤0.09% sodium azide. |

## Description

Reacts with the program death 1 (PD-1) receptor CD279, a member of the Ig superfamily. CD279 is an immunoregulatory receptor expressed on activated T cells, B cells and myeloid cells. Mice deficient in CD279 show a breakdown of peripheral tolerance and manifest multiple autoimmune symptoms. It contains an immunoreceptor tyrosine-based inhibitory motif (ITIM) in the cytoplasmic region. 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.



Profile of anti-PD-1 (MIH4) reactivity on MIT34 transfectant cells analyzed by flow cytometry

## Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Application Notes

## Application

|                |                  |
|----------------|------------------|
| Flow cytometry | Routinely Tested |
|----------------|------------------|

## Suggested Companion Products

| Catalog Number | Name                             | Size      | Clone   |
|----------------|----------------------------------|-----------|---------|
| 555749         | PE Mouse IgG1, κ Isotype Control | 100 tests | MOPC-21 |

## 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-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

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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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

## References

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- Latchman Y, Wood CR, Chernova T, et al. PD-L2 is a second ligand for PD-1 and inhibits T cell activation. *Nat Immunol.* 2001; 2(3):261-268. (Biology)
- Nishimura H, Minato N, Nakano T, Honjo T. Immunological studies on PD-1 deficient mice: implication of PD-1 as a negative regulator for B cell responses. *Int Immunol.* 1998; 10(10):1563-1572. (Biology)