

## anti-human CD279 PE-conjugated

PE-conjugated monoclonal antibody EH12.2H7 to human CD279

**Cat-No:** 21272794

500 µl

**Clone:** EH12.2H7

**Specificity:** The mouse monoclonal antibody EH12.2H7 recognizes CD279 / PD-1 (programmed cell death 1), a 55 kDa type I transmembrane protein expressed above all during T cell development, on activated T cells, activated B cells, and activated monocytes.

**Isotype subclass:** Mouse IgG1

**Form:** The purified antibody is conjugated with R-Phycoerythrin (R-PE) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

**Physical state:** liquid

**Buffer/Additives/Preservative:** PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

**Storage conditions:** Store at 4 °C. Avoid prolonged exposure to light.

**Application:** Flow Cytometry

**Background:** CD279 / PD-1 (programmed cell death 1), a transmembrane protein of CD28/CTLA-4 family. It is expressed inducibly mainly on activated T, B, and myeloid cells and plays a role in maintaining peripheral self-tolerance. Binding to its receptors CD273 and CD274 is associated with inhibition of T cell proliferation and induction of their anergy. It is also expressed during thymic development. Some variants of CD279 are associated with susceptibility to systemic lupus erythematosus, type 1 diabetes, and rheumatoid arthritis.

### References:

- \*Zhou J, Cheung AK, Liu H, Tan Z, Tang X, Kang Y, Du Y, Wang H, Liu L, Chen Z: Potentiating functional antigen-specific CD8 $\alpha$ ; T cell immunity by a novel PD1 isoform-based fusion DNA vaccine. *Mol Ther.* 2013 Jul;21(7):1445-55.
- \*Xu Y, Weatherall C, Bailey M, Alcantara S, De Rose R, Estaquier J, Wilson K, Suzuki K, Corbeil J, Cooper DA, Kent SJ, Kelleher AD, Zaunders J: Simian immunodeficiency virus infects follicular helper CD4 T cells in lymphoid tissues during pathogenic infection of pigtail macaques. *J Virol.* 2013 Apr;87(7):3760-73.
- \*Gros A, Robbins PF, Yao X, Li YF, Turcotte S, Tran E, Wunderlich JR, Mixon A, Farid S, Dudley ME, Hanada K, Almeida JR, Darko S, Douek DC, Yang JC, Rosenberg SA: PD-1 identifies the patient-specific CD8 $\alpha$ ; tumor-reactive repertoire infiltrating human tumors. *J Clin Invest.* 2014 May;124(5):2246-59.
- \*Haile ST, Dalal SP, Clements V, Tamada K, Ostrand-Rosenberg S: Soluble CD80 restores T cell activation and overcomes tumor cell programmed death ligand 1-mediated immune suppression. *J Immunol.* 2013 Sep 1;191(5):2829-36.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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