

PE/Dazzle™ 594 anti-human CD223 (LAG-3)

Catalog # / Size: 2446090 / 100 tests
2446085 / 25 tests

Clone: 7H2C65

Isotype: Mouse IgG1, κ

Immunogen: Human LAG-3 transfected cells.

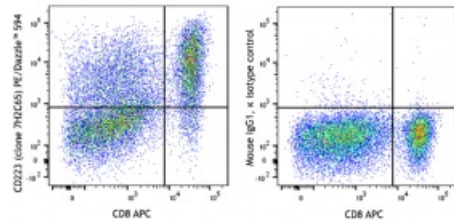
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Workshop Number: HCDM listed

Concentration: Lot-specific



Anti-CD3/CD28 and recombinant IL-2 stimulated (three days) peripheral blood monocular cells (PBMCs) were stained with CD8 APC and CD223 (LAG-3) (clone 7H2C65) PE/Dazzle™ 594 (left) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μL per million cells in 100 μL staining volume or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: The staining of clone 7H2C65 cannot be blocked by clone 11C3C65, which is another anti-human CD223 (LAG-3) antibody.

- Application References:**
1. Costes V, *et al.* 1999. *Hum. Pathol.* 30:1405. (IF)
 2. Gattei V, *et al.* 1999. *Br. J. Haematol.* 104:152. (WB)
 3. Bologna-Molina R, *et al.* 2008. *Oral Oncol.* 44:805. (IHC)
 4. Itoua MR, *et al.* 2014. *Biomed. Res. Int.* 2014:536482.

Description: CD223, also known as LAG-3, is a 70 kD type I transmembrane glycoprotein that is involved in T-cell signaling. Similar to CD4, CD223 binds MHC class II, but with a higher affinity. CD223 negatively regulates T-cell activation. It is expressed by activated T-cells and natural killer cells (NKs), as well as regulatory T-cells. It is transiently expressed on the surface of activated T-cells in acute conditions but high expression is maintained under tolerizing conditions. CD223 deficiency results in reduced tumor growth. CD223 and PD-1 can act in synergy and reverse exhausted phenotypes, improve tumor rejection, and control viral load.

- Antigen**
- References:**
1. Castelli C, *et al.* 2014. *Oncoimmunology* 3(11):e967146.
 2. Poirier N, *et al.* 2011. *Clin. Exp. Immunol.* 164:265.
 3. Juno JA, *et al.* 2015. *Retrovirology* 12:17.
 4. Casati C, *et al.* 2006. *Cancer Res.* 66:4450.