# **Product Data Sheet**

## APC/Fire™ 750 anti-human CD223 (LAG-3)

**Catalog #** / 2446650 / 100 tests

**Size:** 2446645 / 25 tests

**Clone:** 11C3C65

**Isotype:** Mouse IgG1, κ

Immunogen: Human LAG-3 transfected cells.

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with

APC/Fire™ 750 under optimal

conditions.

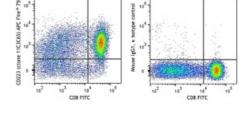
**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: 750 under optimal conditions.

Concentration: Lot-specific



CD3/CD28/IL-2 stimulated (three days) peripheral blood mononuclear cells were stained with CD8 FITC and CD223 (LAG-3, clone 11C3C65) APC Fire™ 750 (left) or mouse IgG1, κ APC Fire™ 750 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.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum

emission of 787 nm.

Application Notes:

The staining of clone 11C3C65 cannot be blocked by clone 7H2C65, which is

another anti-human CD223 (LAG-3)

antibody.

Application References:

1. Bradstock KF, et al. 1980. J. Natl. Cancer Inst. 65:33.

2. Csiba A, et al. 1984. Br. J. Cancer 50:699.

3. Tchilian EZ, et al. 2001. J. Immunol. 166:1308.

4. Lee MS, et al. 2004. Int. Immunol. 16:1109.

#### **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 Tcells 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.