Anti-Human CD163-165Ho

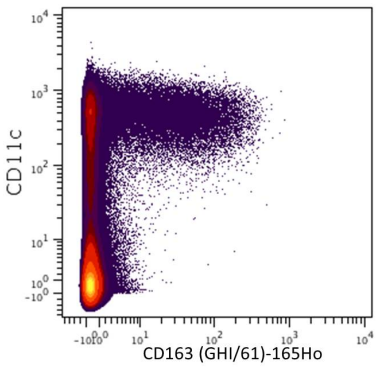
Catalog: 3165017B
Package Size: 100 tests
Storage: Store product at 4°C. Do not freeze.
Reactivity: Rhesus,

Clone: GHI/61
Isotype: IgG1
Formulation: Antibody stabilizer with 0.05% Sodium Azide

Technical Information

Validation: Each lot of conjugated antibody is quality control tested by CyTOF® analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended Usage: The suggested use is 1 µl for up to 3 X 10^6 live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human PBMCs stained with 159Tb-anti-CD11c (Bu15) and 165Ho-anti-CD163 (GHI/61).

Description

CD163 is a 130 kDa membrane protein with a short cytoplasmic tail, a single transmembrane segment, and a large ectodomain consisting of nine scavenger receptor class B domains. CD163 expression is restricted to the monocytic-macrophage lineage with high expression in red pulp macrophages, bone marrow macrophages, liver macrophages (Kupffer cells) and lung macrophages. Low or absent CD163 expression is seen in other monocyte-derived cells, such as dendritic cells, Langerhans cells, and white pulp macrophages in the spleen. CD163 is a high-affinity receptor of human haptoglobin (Hp)-hemoglobin (Hb) complexes. The removal of Hb and the generation of heme metabolites result in a localized anti-inflammatory response.

It has been reported (Maniecki et al., 2011) that calcium inhibits the binding of clone GHI/61 to CD163. Use calcium-free staining buffer such as Maxpar Cell Staining Buffer (201068). Also, detection of CD163 positive monocytes is highly variable depending on use of different anticoagulants during cellular collection and preparation. Heparin has the highest inhibitory effect on clone GHI/61 and should be avoided.

References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Maniecki MB, Etzerodt A, Moestrup S, Møller J, Graversen J. Comparative assessment of the recognition of domain-specific CD163 monoclonal antibodies in human monocytes explains wide discrepancy in reported levels of cellular surface CD163 expression. Immunobiology. 2011; 216(8):882-890

Ornatsky, O. I., et al. **Highly Multiparametric Analysis by Mass Cytometry.** J Immunol Methods 361 (1-2):1-20, 2010.

For technical support visit fluidigm.com/support
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