

Product datasheet

PE Anti-CD163 antibody [GHI/61] ab95613

★★★★☆ [2 Abreviews](#) [4 References](#) [1 Image](#)

Overview

Product name	PE Anti-CD163 antibody [GHI/61]
Description	PE Mouse monoclonal [GHI/61] to CD163
Host species	Mouse
Conjugation	PE. Ex: 488nm, Em: 575nm
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human CD163. Hairy cell leukaemia
Positive control	Normal Human peripheral blood cells
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.20 Preservative: 0.09% Sodium azide
Purity	Protein G purified
Clonality	Monoclonal
Clone number	GHI/61
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab95613 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt	★★★★★ (1)	Use 5µl for 10 ⁶ cells. ab91357 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Acute phase-regulated receptor involved in clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages and may thereby protect tissues from free hemoglobin-mediated oxidative damage. May play a role in the uptake and recycling of iron, via endocytosis of hemoglobin/haptoglobin and subsequent breakdown of heme. Binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner. Exhibits a higher affinity for complexes of hemoglobin and multimeric haptoglobin of HP*1F phenotype than for complexes of hemoglobin and dimeric haptoglobin of HP*1S phenotype. Induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1. Isoform 3 exhibits the higher capacity for ligand endocytosis and the more pronounced surface expression when expressed in cells. After shedding, the soluble form (sCD163) may play an anti-inflammatory role, and may be a valuable diagnostic parameter for monitoring macrophage activation in inflammatory conditions.

Tissue specificity

Expressed in monocytes and mature macrophages such as Kupffer cells in the liver, red pulp macrophages in the spleen, cortical macrophages in the thymus, resident bone marrow macrophages and meningeal macrophages of the central nervous system. Expressed also in blood. Isoform 1 is the lowest abundant in the blood. Isoform 2 is the lowest abundant in the liver and the spleen. Isoform 3 is the predominant isoform detected in the blood.

Sequence similarities

Contains 9 SRCR domains.

Domain

The SRCR domain 3 mediates calcium-sensitive interaction with hemoglobin/haptoglobin complexes.

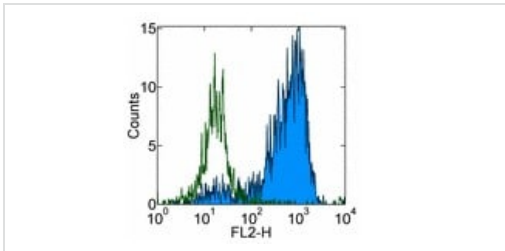
Post-translational modifications

A soluble form (sCD163) is produced by proteolytic shedding which can be induced by lipopolysaccharide, phorbol ester and Fc region of immunoglobulin gamma. This cleavage is dependent on protein kinase C and tyrosine kinases and can be blocked by protease inhibitors. The shedding is inhibited by the tissue inhibitor of metalloproteinase TIMP3, and thus probably induced by membrane-bound metalloproteinases ADAMs.
Phosphorylated.

Cellular localization

Secreted and Cell membrane. Isoform 1 and isoform 2 show a lower surface expression when expressed in cells.

Images



Flow Cytometry - PE Anti-CD163 antibody [GH1/61]
(ab95613)

Staining of normal Human peripheral blood cells with Mouse IgG1 ?
Isotype Control PE (open histogram) or ab95613 (filled histogram).
Cells in the monocyte gate were used for analysis.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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