

Product datasheet

Anti-CD163 antibody ab227781

1 Image

Overview

Product name	Anti-CD163 antibody
Description	Rabbit polyclonal to CD163
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Cow, Pig 
Immunogen	Synthetic peptide within Human CD163 aa 1-100. The exact sequence is proprietary. (Near N-terminus). Database link: Q86VB7
Positive control	IHC-P: Human skin tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab227781** in the following tested applications.

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

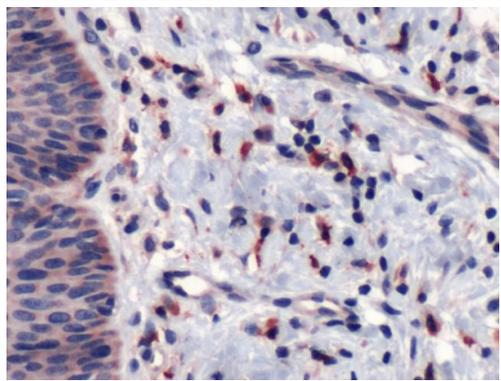
Application	Abreviews	Notes
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Application	Abreviews	Notes
IHC-P		<p>1/200.</p> <p>Perform heat mediated antigen retrieval with 1 mM EDTA buffer pH 8.0 before commencing with IHC staining protocol.</p> <p>Primary antibody incubation for 30 minutes at room temperature.</p>

Target

Function	<p>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.</p> <p>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.</p>
Tissue specificity	<p>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.</p>
Sequence similarities	<p>Contains 9 SRCR domains.</p>
Domain	<p>The SRCR domain 3 mediates calcium-sensitive interaction with hemoglobin/haptoglobin complexes.</p>
Post-translational modifications	<p>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.</p> <p>Phosphorylated.</p>
Cellular localization	<p>Secreted and Cell membrane. Isoform 1 and isoform 2 show a lower surface expression when expressed in cells.</p>

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD163 antibody (ab227781)

Formalin-fixed, paraffin-embedded human skin tissue stained for CD163 using ab227781 at 1/200 dilution in immunohistochemical analysis.

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