

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD163 in direct ELISA.
Source	Monoclonal Rat IgG _{2B} Clone # 612722
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line, NS0-derived recombinant mouse CD163 Val39-Thr1045 Accession # Q2VLH6
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CD163, also known as M130 and p155, is a 130-160 kDa type I transmembrane protein belonging to group B of the cysteine-rich scavenger receptor family (1). Mature mouse CD163 consists of a 1007 amino acid (aa) extracellular domain (ECD) with 9 scavenger receptor cysteine-rich (SRCR) domains, a 21 aa transmembrane segment, and a 55 aa cytoplasmic domain (2). Alternative splicing of mouse CD163 generates an isoform with a substitution in the cytoplasmic region. Within the ECD, mouse CD163 shares 75% and 90% aa sequence identity with human and rat CD163, respectively. CD163 is expressed on monocytes and macrophages and is inducible by immunosuppressant glucocorticoids and IL-10 (3-5). A soluble form is shed from the cell surface by TACE or neutrophil elastase mediated cleavage (6, 7) in response to oxidative stress, Prostaglandin F_{2a} stimulation, or the activation of Fc gamma receptors, TLR1, 2, 5, or 6 (8-10). CD163 mediates monocyte binding to bacteria, leading to the release of inflammatory cytokines (11). It is essential for the circulatory clearance of hemoglobin-haptoglobin (Hb-Hp) complexes as well as free hemoglobin (12, 13). It can also mediate monocyte-erythroblast adhesion and promote erythroblast expansion (14). CD163 binds and internalizes the cytokine TWEAK, and the ratio of soluble CD163 to TWEAK in the plasma is elevated during atherosclerosis (15, 16).

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