CD163 (RM3/1): sc-33715

**BACKGROUND**

CD163, also designated M130, is a macrophage-associated antigen that is a member of the scavenger receptor cysteine-rich (SRCR) superfamily. It is highly expressed on macrophages and to a lesser extent on monocytes. The acute phase-regulated and signal-inducing macrophage protein, CD163, is a receptor that scavenges hemoglobin by mediating endocytosis of haptoglobin-hemoglobin complexes. CD163 binds only haptoglobin and hemoglobin in complex, which indicates the exposure of a receptor-binding neoepitope. The receptor-ligand interaction is calcium-dependent and of high affinity. The existence of several CD163 isoforms, which differ in the structure of their cytoplasmic domains and putative phosphorylation sites, suggests that these isoforms also differ in their signaling mechanism. The gene which encodes CD163 maps to human chromosome 12p13.31.

**CHROMOSOMAL LOCATION**

Genetic locus: CD163 (human) mapping to 12p13.31.

**SOURCE**

CD163 (RM3/1) is a mouse monoclonal antibody raised against monocytes of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

CD163 (RM3/1) is available conjugated to agarose (sc-33715 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33715 HRP), 200 µg/ml, for WB, (HCIP) and ELISA; to either phycoerythrin (sc-33715 PE), fluorescein (sc-33715 FITC), Alexa Fluor® 488 (sc-33715 AF488), Alexa Fluor® 546 (sc-33715 AF546), Alexa Fluor® 594 (sc-33715 AF594) or Alexa Fluor® 647 (sc-33715 AF647), 200 µg/ml, for WB (RGB), IF, IHOP) and FCM; and to either Alexa Fluor® 680 (sc-33715 AF680) or Alexa Fluor® 790 (sc-33715 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**APPLICATIONS**

CD163 (RM3/1) is recommended for detection of CD163 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for CD163 siRNA (h): sc-42834, CD163 shRNA Plasmid (h): sc-42834-SH and CD163 shRNA (h) Lentiviral Particles: sc-42834-V.

Molecular Weight of CD163: 130 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

**SELECT PRODUCT CITATIONS**


2. Bernsmeier, C., et al. 2015. Patients with acute-on-chronic liver failure have increased numbers of regulatory immune cells expressing the receptor tyrosine kinase MERTK. Gastroenterology 148: 603-615.


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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