

CD163 (H-130): sc-33559

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 neopeptide. 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.

REFERENCES

1. Law, S.K., et al. 1993. A new macrophage differentiation antigen which is a member of the scavenger receptor superfamily. *Eur. J. Immunol.* 23: 2320-2325.
2. Ritter, M., et al. 1999. Genomic organization and chromosomal localization of the human CD163 (M130) gene: a member of the scavenger receptor cysteine-rich superfamily. *Biochem. Biophys. Res. Commun.* 260: 466-474.

CHROMOSOMAL LOCATION

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

SOURCE

CD163 (H-130) is a rabbit polyclonal antibody raised against amino acids 1027-1156 mapping at the C-terminus of CD163 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

CD163 (H-130) is recommended for detection of CD163 isoforms a and b of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

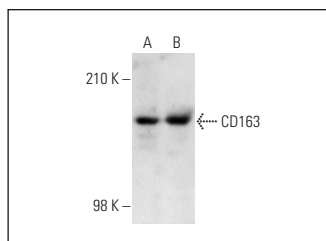
Molecular Weight of CD163: 130 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225 or THP-1 cell lysate: sc-2238.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD163 (H-130): sc-33559. Western blot analysis of CD163 expression in THP-1 (A) and CCRF-CEM (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wang, H., et al. 2009. Targeting NFκB with a natural triterpenoid alleviates skin inflammation in a mouse model of psoriasis. *J. Immunol.* 183: 4755-4763.
2. Komori, T., et al. 2011. Site-specific subtypes of macrophages recruited after peripheral nerve injury. *Neuroreport* 22: 911-917.
3. Swaminathan, S., et al. 2013. Gadolinium contrast agent-induced CD163⁺ ferroportin⁺ osteogenic cells in nephrogenic systemic fibrosis. *Am. J. Pathol.* 183: 796-807.

RESEARCH USE

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

PROTOCOLS

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



Try **CD163 (GHI/61): sc-20066**, our highly recommended monoclonal alternative to CD163 (H-130). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD163 (GHI/61): sc-20066**.