

CD163 (C-16): sc-18794

BACKGROUND

CD163, also designated M130, is a macrophage-associated antigen that is a member of the scavenger receptor cysteine-rich (SRCR) superfamily, which is exclusively expressed by monocytes and macrophages. CD163 shows an exclusive expression on resident macrophages (e.g., red pulp macrophages, alveolar macrophages). 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

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2. Ritter, M., Buechler, C., Langmann, T. and Schmitz, G. 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.
3. Van den Heuvel, M.M., Tensen, C.P., van As, J.H., Van den Berg, T.K., Fluitsma, D.M., Dijkstra, C.D., Dopp, E.A., Droste, A., et al. 1999. Regulation of CD163 on human macrophages: cross-linking of CD163 induces signaling and activation. *J. Leukoc. Biol.* 66: 858-866.
4. Stover, C.M., Schleyden, J., Gronlund, J., Speicher, M.R., Schwaebler, W.J. and Holmskov, U. 2000. Assignment of CD163B, the gene encoding M160, a novel scavenger receptor, to human chromosome 12p13.3 by *in situ* hybridization and somatic cell hybrid analysis. *Cytogenet. Cell Genet.* 90: 246-247.

CHROMOSOMAL LOCATION

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

SOURCE

CD163 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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.

Blocking peptide available for competition studies, sc-18794 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CD163 (C-16) is recommended for detection of CD163 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CD163 (C-16) is also recommended for detection of CD163 in additional species, including canine and bovine.

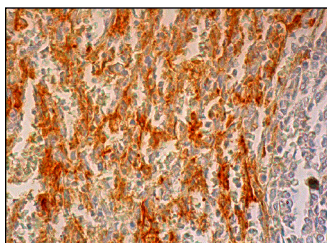
Suitable for use as control antibody for CD163 siRNA (h): sc-42834, CD163 shRNA Plasmid (h): sc-42834-SH and CD163 shRNA (h) Lentiviral Particles: sc-42834-V.

Molecular Weight of CD163: 130 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CD163 (C-16): sc-18794. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in red pulp.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **CD163 (GHI/61): sc-20066**, our highly recommended monoclonal alternative to CD163 (C-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD163 (GHI/61): sc-20066**.