

CD163 (M-96): sc-33560

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 (mouse) mapping to 6 F2.

SOURCE

CD163 (M-96) is a rabbit polyclonal antibody raised against amino acids 1026-1121 mapping at the C-terminus of CD163 of mouse origin.

PRODUCT

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

APPLICATIONS

CD163 (M-96) is recommended for detection of CD163 of mouse and rat 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 (m): sc-42835, CD163 shRNA Plasmid (m): sc-42835-SH and CD163 shRNA (m) Lentiviral Particles: sc-42835-V.

Molecular Weight of CD163: 130 kDa.

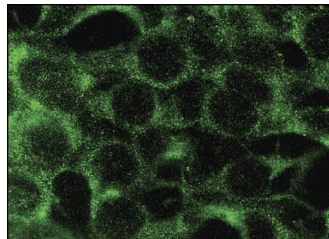
STORAGE

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.

DATA



CD163 (M-96): sc-33560. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Komita, H., et al. 2008. CD8⁺ T-cell responses against hemoglobin-β prevent solid tumor growth. *Cancer Res.* 68: 8076-8084.
2. Ly, L.V., et al. 2010. In aged mice, outgrowth of intraocular melanoma depends on proangiogenic M2-type macrophages. *J. Immunol.* 185: 3481-3488.
3. Sindrilaru, A., et al. 2011. An unrestrained proinflammatory M1 macrophage population induced by iron impairs wound healing in humans and mice. *J. Clin. Invest.* 121: 985-997.
4. Pagani, A., et al. 2011. Low hepcidin accounts for the proinflammatory status associated with iron deficiency. *Blood* 118: 736-746.
5. Bosurgi, L., et al. 2012. Transplanted mesoangioblasts require macrophage IL-10 for survival in a mouse model of muscle injury. *J. Immunol.* 188: 6267-6277.
6. Kawahara, K., et al. 2012. Intracerebral microinjection of interleukin-4/interleukin-13 reduces β-amyloid accumulation in the ipsilateral side and improves cognitive deficits in young amyloid precursor protein 23 mice. *Neuroscience* 207: 243-260.
7. Pinto, A.R., et al. 2012. An abundant tissue macrophage population in the adult murine heart with a distinct alternatively-activated macrophage profile. *PLoS ONE* 7: e36814.
8. Hunt, L.C., et al. 2013. An anti-inflammatory role for leukemia inhibitory factor receptor signaling in regenerating skeletal muscle. *Histochem. Cell Biol.* 139: 13-34.

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Try **CD163 (ED2): sc-58965**, our highly recommended monoclonal alternative to CD163 (M-96).