

## Mouse Anti Rat CD163 Monoclonal Antibody

DMABT-47170MR Mouse(CD163)

Lot. No. (See product label)

## PRODUCT INFORMATION

**Product Overview** Mouse Anti Rat CD163

**Immunogen** Rat Spleen cell homogenate

Host Mouse Isotype lgG1 **Species** Rat Clone FE3 Conjugation N/A

**Applications** IHC, ELISA, FCM, IF, IP, WB

**Dilution** IHC: 1/50 - 1/100; FCM: 1/10 - 1/100

## **PACKAGING**

Format Purified IgG - liquid

**Protein Concentration** IgG concentration 0.5 mg/ml Buffer Phosphate buffered saline

Store at +4 °C or at -20 °C if preferred. This product should be stored undiluted. Storage in frost-free Storage

freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody.

Should this product contain a precipitate we recommend microcentrifugation before use.

Preservative 0.09%Sodium Azide

Shelf Life 18 months from date of despatch.

## **BACKGROUND**

Introduction CD163 (Cluster of Differentiation 163) is a human protein encoded by the CD163 gene. Acute phase-

regulated receptor involved in clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages and may thereby protect tissues from free hemoglobin-mediated oxidative damage. May play a role in the uptake and recycling of iron, via endocytosis of hemoglobin/haptoglobin and subsequent breakdown of heme. Binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner. Exhibits a higher affinity for complexes of hemoglobin and multimeric haptoglobin of HP\*1F phenotype than for complexes of hemoglobin and dimeric haptoglobin of HP\*1S phenotype. Induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1. Isoform 3 exhibits the higher capacity for ligand endocytosis and the more pronounced surface expression when expressed in cells. After shedding, the soluble form (sCD163) may play an anti-inflammatory role, and may be a valuable diagnostic parameter for monitoring macrophage activation in inflammatory conditions.

Keywords

M130; MM130; scavenger receptor cysteine-rich type 1 protein M130; OTTHUMP00000238617; OTTHUMP00000238618; CD163 Molecule; OTTHUMP00000238619; OTTHUMP00000238620;

hemoglobin scavenger receptor; macrophage-associated antigen; CD163