# Anti-Mannose Receptor(CD206) Antibody [JF0953]

# ET1702-04

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| **Product Type:** | Recombinant Rabbit monoclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse |
| **Applications:** | WB, IF-Cell, FC |
| **Molecular Wt:** | Predicted band size: 166 kDa |
| **Clone number:** | JF0953 |

**Description:** CD206, also known as macrophage mannose receptor type C (MMR or MRC1), is a type I membrane receptor protein. It is an phagocytic and endocytic receptor that can recognize carbohydrate ligands in target molecules. The extracellular portion of the protein includes eight C-type carbohydrate recognition domains (CRD) which are clustered together to achieve higher affinity binding to saccharides. CD206 is found on macrophages and on endothelial cells of the liver and is the only known example of a C-type lectin that contains multiple C-type CRDs. CD206 mediates the endocytosis of glycoproteins by macrophages and binds high-mannose structures on the surface of potentially pathogenic viruses, fungi and bacteria enabling them to be neutralized by phagocytic engulfment. During inflammation, CD206 is crucial for rapid clearance of several mannose-bearing serum glycoproteins but does not regulate the initiation of inflammation. CD206 is primarily expressed in mature tissue macrophages and immature dendritic cells, as well as hepatic and lymphatic endothelial cells, retinal pigmental epithelium (RPE) and mesangial cells.

**Immunogen:** Synthetic peptide within Human CD206 aa 1,407-1,456 / 1,456.

**Positive control:** Human lung tissue lysate, HepG2 cell lysate, mouse lung tissue lysate, D3 cell lysate, 293T cell lysate, MCF-7 cell lysate, HepG2.

**Subcellular location:** Endosome membrane, Cell membrane.

**Database links:** SwissProt: P22897 Human | Q61830 Mouse

**Recommended Dilutions:**

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| **WB** | 1:1,000-1:5,000 |
| **IF-Cell** | 1:100 |
| **FC** | 1:500-1:1,000 |

**Storage Buffer:** 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

## Images

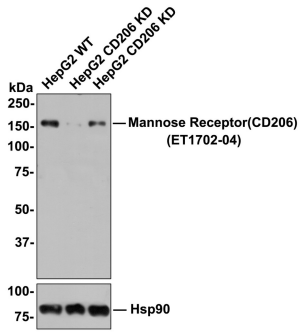


**Fig1:** All lanes: Western blot analysis of CD206 with anti-CD206 antibody[JF0953] (ET1702-04) at 1:1,000 dilution.
Lane 1: Wild-type HepG2 whole cell lysate (10 µg).
Lane 2: CD206 knockdown HepG2 whole cell lysate (10 µg).
Lane 3: CD206 knockdown HepG2 whole cell lysate (10 µg).

ET1702-04 was shown to specifically react with CD206 in wild-type Hela cells. Weakened bands were observed when CD206 knockdown samples were tested. Wild-type and CD206 knockdown samples were subjected to SDS-PAGE. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM in TBST for 1 hour at room temperature. The primary antibody (ET1702-04, 1/1,000) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG-HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

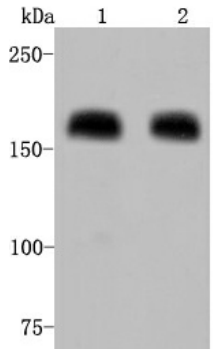


**Fig2:** Western blot analysis of Mannose Receptor(CD206) on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1702-04, 1/1,000) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.
**Positive control:**
Lane 1: Human lung tissue lysate
Lane 2: HepG2 cell lysate

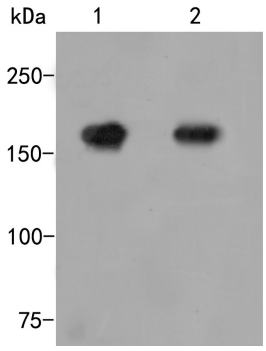


**Fig3:** Western blot analysis of Mannose Receptor(CD206) on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1702-04, 1/1,000) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.
**Positive control:**
Lane 1: Mouse lung tissue lysate
Lane 2: D3 cell lysate

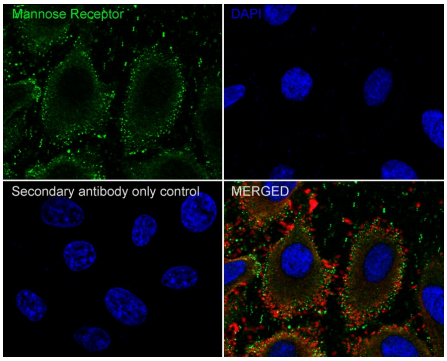


**Fig4:** Immunocytochemistry analysis of HepG2 cells labeling Mannose Receptor(CD206) with Rabbit anti-Mannose Receptor(CD206) antibody (ET1702-04) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Mannose Receptor(CD206) antibody (ET1702-04) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

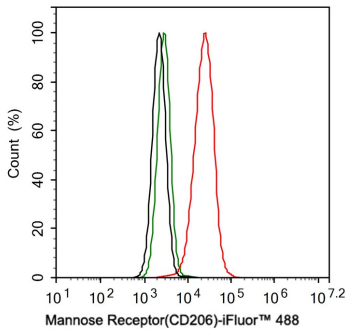


**Fig5:** Flow cytometric analysis of HepG2 cells labeling Mannose Receptor(CD206).

Cells were fixed and permeabilized. Then stained with the primary antibody (ET1702-04, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Huen SC et al. GM-CSF Promotes Macrophage Alternative Activation after Renal Ischemia/Reperfusion Injury. J Am Soc Nephrol 26:1334-45 (2015).
2. Lean QY et al. Orally Administered Enoxaparin Ameliorates Acute Colitis by Reducing Macrophage-Associated Inflammatory Responses. PLoS One 10:e0134259 (2015).