

## HA724378



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Monkey
<b>Applications:</b>	ELISA(Det)
<b>Clone number:</b>	PSH23-47

**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:** Recombinant protein within Human Mannose Receptor(CD206) aa 1-361 (HA211390).

**Positive control:** Recombinant Human Mannose Receptor(CD206) protein (HA211390).

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

**Database links:** SwissProt: P22897 Human

**Recommended Dilutions:**

**ELISA(Det)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH23-46] to Human/Monkey Mannose Receptor(CD206) (Capture) (HA724377) and Recombinant Human Mannose Receptor(CD206) protein (HA211390) as the standard. The reference range value is 15.6-4,000 pg/mL.

**Storage Buffer:** 1\*PBS (pH7.4).

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

**Purity:** Protein A affinity purified.

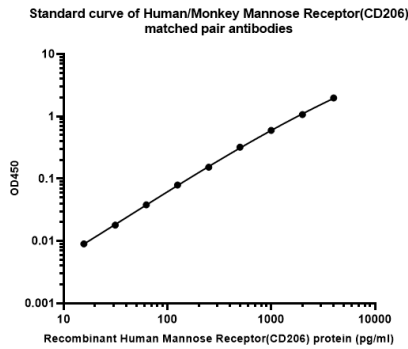
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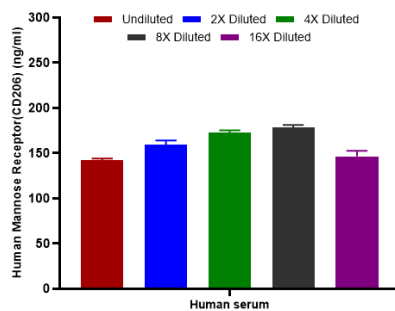
**Fig1:** Sandwich ELISA analysis of Human/Monkey Mannose Receptor(CD206) matched pair antibodies

Capture: HA724377, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-46]

Detector: HA724378, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-47]

Elisa assay was performed by coating wells of a 96-well plate with 100  $\mu$ l per well of capture antibody (HA724377) diluted in carbonate/bicarbonate buffer, at a concentration of 5  $\mu$ g/mL overnight at 4°C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.2% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human Mannose Receptor(CD206) protein (HA211390) starting from 4,000 pg/ml to 0 pg/ml and detect antibody (HA724378, Biotin, 0.2  $\mu$ g/ml) for 1 hour at 30°C with shaking. Then the plate was washed and incubated with 100  $\mu$ l per well of SA-HRP for 0.5 hour at 30°C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

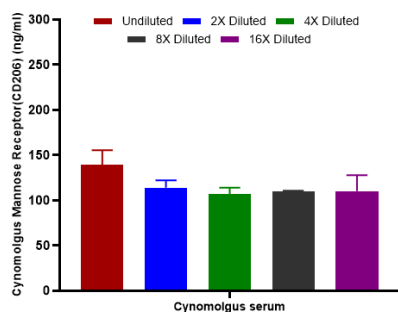
**Fig2:** Interpolated concentrations of native Mannose Receptor(CD206) in human serum samples.



Capture: HA724377, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-46]

Detector: HA724378, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-47]

The concentrations of Mannose Receptor(CD206) were measured in duplicates, interpolated from the Mannose Receptor(CD206) standard curve and corrected for sample dilution. Undiluted samples are human serum 2%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). The mean Mannose Receptor(CD206) concentration was determined to be 159.7 ng/ml in human serum.

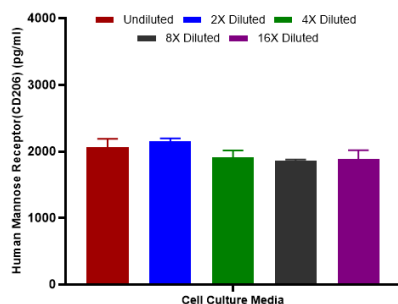


**Fig3:** Interpolated concentrations of native Mannose Receptor(CD206) in Cynomolgus serum samples.

Capture: HA724377, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-46]

Detector: HA724378, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-47]

The concentrations of Mannose Receptor(CD206) were measured in duplicates, interpolated from the Mannose Receptor(CD206) standard curve and corrected for sample dilution. Undiluted samples are Cynomolgus serum 2.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Mannose Receptor(CD206) concentration was determined to be 116.1 ng/ml in Cynomolgus serum.



**Fig4:** Interpolated concentrations of spiked Mannose Receptor(CD206) in human cell culture media samples.

Capture: HA724377, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-46]

Detector: HA724378, Human/Monkey Mannose Receptor(CD206) Rabbit mAb [PSH23-47]

The concentrations of Mannose Receptor(CD206) were measured in duplicates, interpolated from the Mannose Receptor(CD206) standard curves and corrected for sample dilution. Diluted samples are as follows: 50% cell culture media with FBS. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

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

## Background References

1. Ray A et al. Targeting CD206+ macrophages disrupts the establishment of a key antitumor immune axis. J Exp Med. 2025 Jan
2. Pommerolle L et al. CD206(+) macrophages are relevant non-invasive imaging biomarkers and therapeutic targets in experimental lung fibrosis. Thorax. 2024 Nov

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