Anti-Human OSMR Antibody [PSH27-42] - BSA and Azide free (Capture)

HA725531

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Cynomolgus monkey
Applications:	ELISA(Cap)
Clone number:	PSH27-42

Description: Oncostatin-M specific receptor subunit beta also known as the Oncostatin M receptor (OSMR) , is one of the receptor proteins for oncostatin M, that in humans is encoded by the OSMR gene. OSMR is a member of the type I cytokine receptor family. This protein heterodimerizes with interleukin 6 signal transducer to form the type II oncostatin M receptor and with interleukin 31 receptor A to form the interleukin 31 receptor, and thus transduces oncostatin M and interleukin 31 induced signaling events. OSMR is widely expressed across non-haematopoietic, hepatocytes, mesothelial cells, glial cells and epithelial cell types across various organs and mammary glands. OSM receptor is abundantly expressed on endothelial and stromal/fibroblast cells in the lung of mice. OSMR expression has been shown to be induced by parathyroid hormone in osteoblasts and OSM.

Immunogen: Recombinant protein within Human OSMR aa 28-740 (HA211377).

Positive control: Recombinant Human OSMR protein (HA211377).

Subcellular location: Membrane.

Database links: SwissProt: Q99650 Human

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH27-43] to Human OSMR (Detecor) (HA725532) and Recombinant Human OSMR protein (HA211377) as the standard. The reference range value is 125-8,000 pg/mL.

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

Storage Instruction: Store at 2-8℃. Avoid freeze.

Purity: Protein A affinity purified.

Images

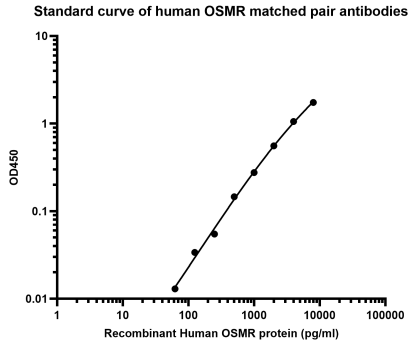


Fig1: Sandwich ELISA analysis of Human OSMR protein matched pair antibodies

Capture: HA725531, Human OSMR Rabbit mAb [PSH27-42]
Detector: HA725532, Human OSMR Rabbit mAb [PSH27-43]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA725531) diluted in carbonate/bicarbonate buffer, at a concentration of 2 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human OSMR protein (HA211377) starting from 8,000 pg/mL to 0 pg/mL and detect antibody (HA725532, Biotin, 0.05 µg/mL) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ 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.

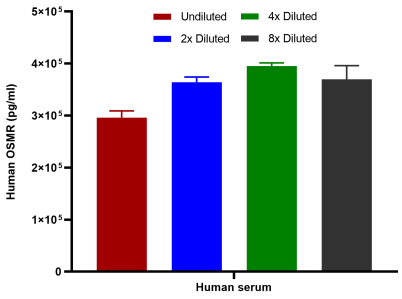


Fig2: Interpolated concentrations of native OSMR in human serum.

Capture: HA725531, Human OSMR Rabbit mAb [PSH27-42]
Detector: HA725532, Human OSMR Rabbit mAb [PSH27-43]

Interpolated concentration of native OSMR was measured in duplicate at different sample concentrations and interpolated from the OSMR standard curves. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean OSMR concentration was determined to be 356,275 pg/mL in human serum.

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

Background References

1. Feng Y et al. OSMR deficiency aggravates pressure overload-induced cardiac hypertrophy by modulating macrophages and OSM/LIFR/STAT3 signalling. J Transl Med. 2023 Apr
2. Lee BY et al. Heterocellular OSM-OSMR signalling reprograms fibroblasts to promote pancreatic cancer growth and metastasis. Nat Commun. 2021 Dec