Biotin Conjugated Anti-Human Poliovirus Receptor/PVR Antibody [PSH12-55] - Detector

HA723466B

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Det), ELISA
Clone number:	PSH12-55

Description: CD155 (cluster of differentiation 155), also known as the poliovirus receptor, is a protein that in humans is encoded by the PVR gene. It is a transmembrane protein that is involved in forming junctions between neighboring cells. It is also the molecule that poliovirus uses to enter cells. The gene is specific to the primates. CD155 is a Type I transmembrane glycoprotein in the immunoglobulin superfamily. Its normal cellular function is in the establishment of intercellular adherens junctions between epithelial cells. The external domain mediates cell attachment to the extracellular matrix molecule vitronectin, while its intracellular domain interacts with the dynein light chain Tctex-1/DYNLT1. The role of CD155 in the immune system is unclear, though it may be involved in intestinal humoral immune responses. Subsequent data has also suggested that CD155 may also be used to positively select MHC-independent T cells in the thymus.

Conjugate: Biotin-conjugated

Immunogen: Recombinant protein within Human CD155 / PVR aa 21-343 (HA210957).

Positive control: Recombinant Human Poliovirus Receptor/PVR protein (HA210957).

Subcellular location: Cell membrane; Secreted.

Database links: SwissProt: P15151 Human

Recommended Dilutions:

ELISA(Det)
ELISA
Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH12-54] to Human Poliovirus Receptor/PVR antibody (Capture) (HA723464) and Recombinant Human Poliovirus Receptor/PVR protein (HA210957) as the standard. The reference range value is 62.5-8,000 pg/mL.
Use at an assay dependent concentration.

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% ProClin300.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

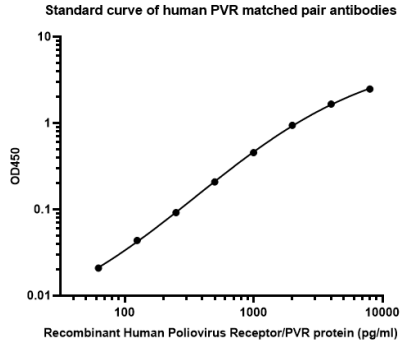

Fig1: Sandwich ELISA analysis of Human Poliovirus Receptor/PVR matched pair antibodies

Capture: HA723464, Human Poliovirus Receptor/PVR Rabbit mAb [PSH12-54]
Detector: HA723465, Human Poliovirus Receptor/PVRn Rabbit mAb [PSH12-55]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723464) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Poliovirus Receptor/PVRn protein (HA210957) starting from 8,000 pg/ml to 0 pg/ml and detect antibody (HA723465, Biotin, 0.2 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.

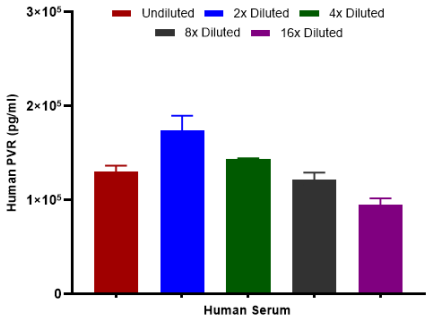

Fig2: Interpolated concentrations of native PVR in human samples.

Capture: HA723464, Human Poliovirus Receptor/PVR Rabbit mAb [PSH12-54]
Detector: HA723465, Human Poliovirus Receptor/PVRn Rabbit mAb [PSH12-55]

Interpolated concentration of native PVR was measured in duplicate at different sample concentrations. Undiluted samples were 1% human serum. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean PVR concentration was determined to be 133,172 pg/mL in human serum.

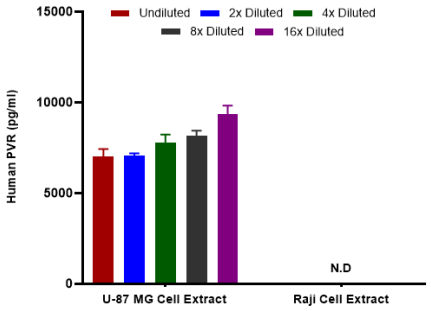

Fig3: Interpolated concentrations of native PVR in U-87 MG and Raji extract samples based on a 1000 µg/ml extract load.

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Detector: HA723465, Human Poliovirus Receptor/PVRn Rabbit mAb [PSH12-55]

Interpolated concentration of native PVR was measured in duplicate at different sample concentrations and interpolated from the PVR standard curves. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean PVR concentration was determined to be 7,903 pg/mL in U-87 MG cell extract. There was no detectable signal in Raji cell extract.

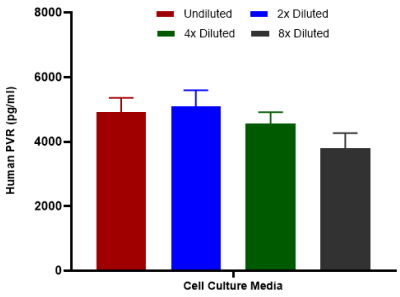

Fig4: Interpolated concentrations of spiked PVR in cell culture media samples.

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The concentrations of PVR were measured in duplicates, interpolated from the PVR standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. 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. Lee BH et al. PVR (CD155) Expression as a Potential Prognostic Marker in Multiple Myeloma. Biomedicines. 2022 May
2. Murakami K et al. The Nectin family ligands, PVRL2 and PVR, in cancer immunology and immunotherapy. Front Immunol. 2024 Aug