Active Recombinant Human PVR protein, Fc/Avi-tagged, Biotinylated

Cat. No. PVR-054H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human PVR(Asp28-Asn343) protein, fused to Fc/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Asp28-Asn343
Description	CD155, also known as PVR (poliovirus receptor), Necl-5 (nectin-like molecule-5) and, in rodents, TAGE4 (tumor-associated glycoprotein E4), is a 70-kDa type I transmembrane glycoprotein in the nectin-related family of adhesion proteins within the immunoglobulin superfamily (1, 2). CD155 binds other molecules including Vitronectin, Nectin-3, DNAM-1/CD226, CD96, and TIGIT but does not bind homotypically (3). Mature human CD155 consists of a 323 amino acid (aa) extracellular domain (ECD) with one N-terminal V-type and two C2-type Ig-like domains, a 24 aa transmembrane segment, and a 50 aa cytoplasmic tail. Within the ECD, human CD155 shares 45% aa sequence identity with mouse and rat CD155, and 52% with human Nectin-2. The V-type domain of CD155 mediates all binding, including to polio virus (1), and alternative splicing within this domain in humans can modulate ligand binding (4). Human CD155 can also be spliced to generate secreted isoforms (5). CD155 is up-regulated on endothelial cells by IFN-gamma and is highly expressed on immature thymocytes, lymph node dendritic cells, and tumor cells of

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	epithelial and neuronal origin (1, 2, 6-9). It is preferentially expressed on Th17 cells compared to Th2 cells (10), and its activation promotes the development of Th1 responses (11). On migrating cells, CD155 is concentrated at the leading edge, where it binds basement membrane Vitronectin, recruits Nectin-3-expressing cells, and cooperates with PDGF and Integrin alpha v beta 3 to promote cell migration (1, 3, 12). Enhanced CD155 expression in tumor cells contributes to loss of contact inhibition and increased migration but also allows tumor cell recognition and killing by DNAM-1 or CD96 expressing NK cells (1, 7, 13). Binding of monocyte DNAM-1 to endothelial cell CD155 promotes transendothelial migration (8). The expression of CD155 on mouse CD8+ thymocytes prevents their premature exit from the thymus (14). Within intestinal Peyer's patches, follicular dendritic cell CD155 activates follicular helper T cells via DNAM-1 or CD96 binding (7-9, 15). CD155 also binds the inhibitory ligand TIGIT on NK and some mature T cells, antagonizing DNAM-1 effects (7, 15, 16).
Predicted N Terminal	Asp28
Form	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.
Bio-activity	Measured by its binding ability in a functional ELISA.
Molecular Mass	86-98 kDa, reducing conditions
Endotoxin	<0.10 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity

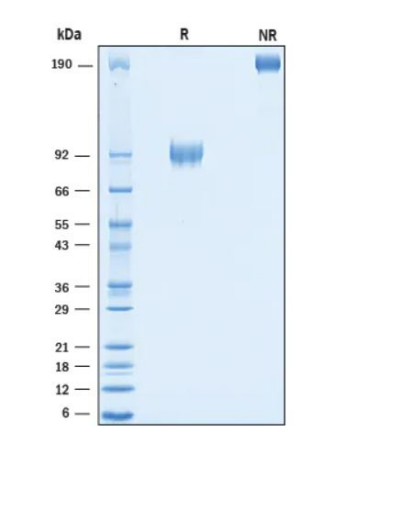
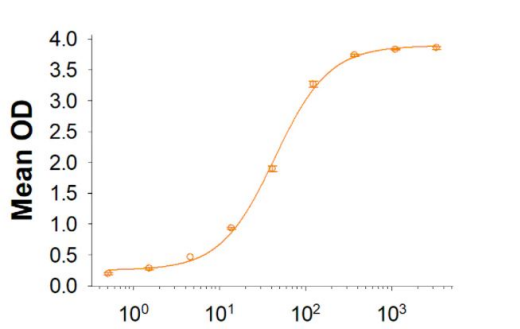
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.12 months from date of receipt, -20 to -70 °C as supplied.1 month, 2 to 8 °C under sterile conditions after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 200 µg/mL in PBS.
Conjugation	Biotin

GENE INFORMATION

Gene Name	PVR poliovirus receptor [Homo sapiens]
Official Symbol	PVR
Synonyms	PVR; poliovirus receptor; PVS; CD155; HVED; Necl 5; NECL5; nectin like 5; Tage4; nectin-like 5; nectin-like protein 5; TAGE4; Necl-5; FLJ25946;
Gene ID	5817
mRNA Refseq	NM_001135768
Protein Refseq	NP_001129240
MIM	173850
UniProt ID	P15151

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

SDS-PAGE	 2 μg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.
Binding Activity	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA