

# Human CD155 / PVR / NECL5 Protein



**Sino Biological Inc.**  
Biological Solution Specialist

Catalog Number: 10109-HCCH

## General Information

### Gene Name Synonym:

CD155; HVED; Necl-5; NECL5; PVS; TAGE4; 3830421F03Rik; CD155; D7Ert458e; HVED; mE4; necl-5; PVS; Taa1; Tage4

### Protein Construction:

The mature form of the extracellular domain (Met 1-Asn 343) of human CD155 (NP\_006496.3) was expressed and purified, with additional five amino acids (DDDDK) at the C-terminus.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Bio Activity:

**Measure by its ability to bind with recombinant human DNAM1 / CD226 .**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Leu 18

### Molecular Mass:

The recombinant human CD155 is a monomeric protein after proteolytic removal of the signal peptide. It consists of 329 amino acids and predicts a molecular mass of 35.7 kDa. As a result of glycosylation, the apparent molecular mass of rhCD155 is approximately 55-60 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

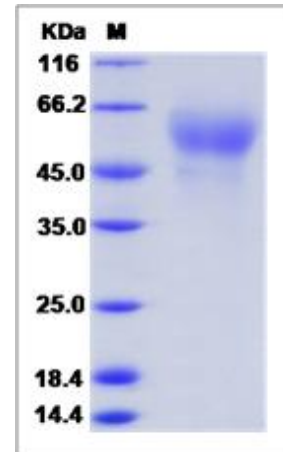
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

CD155, commonly known as PVR (poliovirus receptor) and Necl-5 (nectin-like molecule-5), is a type I transmembrane single-span glycoprotein, and belongs to the nectins and nectin-like (Necl) subfamily. CD155 was originally identified based on its ability to mediate the cell attachment and entry of poliovirus (PV), an etiologic agent of the central nervous system disease poliomyelitis. The normal cellular function is in the establishment of intercellular adherens junctions between epithelial cells. CD155 may assist in an efficient humoral immune response generated within the intestinal immune system. It has been demonstrated that CD155 can be recognized and bound by DNAM-1 and CD96 which promote the adhesion, migration and NK-cell killing, and thus efficiently prime cell-mediated tumor-specific immunity.

## References

1. Freistadt MS, *et al.* (2000) Hematopoietic cells from CD155-transgenic mice express CD155 and support poliovirus replication *ex vivo*. *Microb Pathog.* 29(4): 203-12.
2. Sato T, *et al.* (2004) Involvement of heterophilic trans-interaction of Necl-5/Tage4/PVR/CD155 with nectin-3 in formation of nectin- and cadherin-based adherens junctions. *Genes Cells.* 9(9): 791-9.
3. Kakunaga S, *et al.* (2004) Enhancement of serum- and platelet-derived growth factor-induced cell proliferation by Necl-5/Tage4/poliovirus receptor/CD155 through the Ras-Raf-MEK-ERK signaling. *J Biol Chem.* 279(35): 36419-25.

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