



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CD112 Protein
Catalog Number: hRP-0569
Manufacturer: LD Biopharma, Inc.

Introduction

Human poliovirus receptor-related protein 2 (PVRL2, CD112) gene encodes a single-pass type I membrane glycoprotein with two Ig-like C2-type domains and an Ig-like V-type domain. This protein is one of the plasma membrane components of adherens junctions. It also serves as an entry for certain mutant strains of herpes simplex virus and pseudorabies virus, and it is involved in cell to cell spreading of these viruses. Variations in this gene have been associated with differences in the severity of multiple sclerosis. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Full-length recombinant human CD112 extracellular domain cDNA (32 - 350 aa, Isoform-a, derived from BC003091) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: CD112 (PVRL2; HVEB; PRR2; VRR2)
Accession Number: NP_002847
Species: Human
Size: 100 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Sanchez-Correa,B., et al., *Decreased expression of DNAM-1 on NK cells from acute myeloid leukemia patients*. Immunol. Cell Biol. 90 (1), 109-115 (2012)



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Shukla,D., *The murine homolog (Mph) of human herpesvirus entry protein B (HveB) mediates entry of pseudorabies virus but not herpes simplex virus types 1 and 2.* J. Virol. 73 (5), 4493-4497 (1999)

Lopez,M., et al., *The human poliovirus receptor related 2 protein is a new hematopoietic/endothelial homophilic adhesion molecule.* Blood 92 (12), 4602-4611 (1998)

Applications

1. May be used for in vitro cell receptors interaction for hematopoietic, endothelial differentiation regulations study coating with this protein.
2. May be used for protein-protein interaction assay development.
3. Potential diagnostic biomarker protein for acute myeloid leukemia.
4. As antigen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEQDVRVQVLPEVRGQLGGTVELPCHLLPPVPGLYISL
VTWQRPDAPANHQNVAAAFHPKMGPSFPPSPKPGSERLSFVSAKQSTGQDTEAELQDATLALHGLT
VEDEGNYTCEFATFPKGSVRGMTWLRVIAKPKNQAEAQKVTFSDPPTVALCISKEGRPPARIS
WLSSLDWEAKETQVSGTLAGTVTVTSRFTLVPSGRADGVTVTCKVEHESFEEPALIPVTLVRY
PPEVSIISGYDDNWYLGRTDATALSCDVRSNPEPTGYDWS'TTSGTFPTSAVAQGSQQLVIHAVDSL
NTTFVCTVTNAVGMGRAEQVIFVRETP