



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CD177 Protein
Catalog Number: hRP-0385
Manufacturer: LD Biopharma, Inc.

Introduction

Human CD177, a glycosyl-phosphatidylinositol (GPI)-linked N-glycosylated cell surface glycoprotein, was first described in a case of neonatal alloimmune neutropenia. CD177 plays a role in neutrophil-endothelial cell interaction. Recent data demonstrated that CD177 also interacts with PECAM-1 protein, so recombinant CD177 protein could be serviced as coating matrix protein for study neutrophil-endothelial cell interactions in vitro.

Full-length extracellular domain of human CD177 (NTN4) gene (22 - 408 aa) was constructed with 31 N-terminal T7/His tag 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. Coating this recombinant protein at 1-10 ug / well (6 well plate) in cell type specific medium can be used for human neutrophil-endothelial cell interaction study in vitro.

Gene Symbol: CD177 (HNA-2a; NB1; GP; PRV-1)
Accession Number: NP_065139
Species: Human
Size: 100 µg / Vial
Composition: 0.5 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 -20°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Bayat,B., et al. *Neutrophil transmigration mediated by the neutrophil-specific antigen CD177 is influenced by the endothelial S536N dimorphism of platelet endothelial cell adhesion*



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molecule-1. J. Immunol. 184 (7), 3889-3896 (2010)

Jerke,U., et al. *Complement receptor Mac-1 is an adaptor for NBI (CD177)-mediated PR3-ANCA neutrophil activation*. J. Biol. Chem. 286 (9), 7070-7081 (2011)

Applications

1. Protein can be used as coating matrix protein for human neutrophil-endothelia cell interaction study in vitro.
2. As highly purified recombinant antigen, it may be used as culture matrix protein for differentiation of human endothelial cell in vitro.

Quality Control

1. Purity: > 90% by SDS-PAGE.
2. Functional Test: Not tested yet.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGFELLLCQFGTVQHVKVSDLPRQWTPKNTSCDSGLG
CQDTLMLIESGPQVSLVLSKGCTEAKDQEPRVTEHRMGPGLSLISYTFVCRQEDFCNNLVNSLP
LWAPQPPADPGSLRCPVCLSMEGCLEGTTEEICPKGTTHCYDGLLRRLRGGGIFSNLRVQGCMPQ
PGCNLLNGTQEIGPVGMTENCNRKDFLTCHRGTTIMTHGNLAQEPTDWTTSNTEMCEVGQVCQE
TLLLLDVGLTSTLVGTKGCSTVGAQNSQKTTIHSAPPGVLVASYTHFCSSDL CNSASSSVLLN
SLPPQAAPVPGDRQCPTCVQPLGTCSSGSPRMTCPRGATHCYDGYIHLGGGLSTKMSIQGCVA
QPSSFLLNHTRQIGIFSAREKRDVQPPASQHEGG