

Product Information

MemDX™ Membrane Protein Human CR1 (Complement C3b/C4b receptor 1 (Knops blood group)) Full Length

Cat. No.: **MPC1393K**

This product is for research use only and is not intended for diagnostic use.

This product is a 223.6 kDa Human CR1 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

CR1

Protein Length

Full length

Protein Class

Receptor; Immunity

Molecular Weight

223.6 kDa

TMD

1

Sequence

MGASSPRSPPEVGPAPGLPFCCGGSLLAVVLLALPVAWGQCNAPEWLP
FARPTNLTDEFEPFIGTYLNYECRPGYSGRPFSIICLNKNSVWTGAKDRCR
RKSCRNPPDPVNGMVHVIKIQFGSQIKYSCTKGYRLIGSSSATCIISGD
TVIWDNETPICDRIPCGLPPTITNGDFISTNRENFHYGSSVVTYRCNPGSG
GRKVFELVGESYICTSNDDQVGIWSGPAPQCIIPNKCTPPNVENGILVS
DNRSLSLNEVVEFRQCQPGFVMKGP RRVKCQALNKWEPELPSCSRVCQPP
PDVLHAERTQRDKDNFSPGQEVFYSCEPGYDLRGAASMRCTPQGDWSPAA
PTCEVKSCDDFMGQLLN GRVLFVNLQLGAKVDFVCDEGFQLKGSSASYC
VLAGMESLWNSSVPVCEQIFCPSPPVIPNGRHTGKPLEVFPFGKTVNYTC
DHPDRGTSFDLIGESTIRCTSDPQGNVWSSPAPRCGILGHCQAPDHFL
FAKLKTQTNASDFPIGTSKYECRPEYYGRPFSITCLDNLVWSSPKDVCK
RKSKCTPPDPVNGMVHVIDIQVGSRINYSCTTGHRLIGHSSAECILSGN
AAHWSTKPPICQRIPCGLPPTIANGDFISTNRENFHYGSSVVTYRCNPGSG
GRKVFELVGESYICTSNDDQVGIWSGPAPQCIIPNKCTPPNVENGILVS
DNRSLSLNEVVEFRQCQPGFVMKGP RRVKCQALNKWEPELPSCSRVCQPP
PDVLHAERTQRDKDNFSPGQEVFYSCEPGYDLRGAASMRCTPQGDWSPAA
PTCEVKSCDDFMGQLLN GRVLFVNLQLGAKVDFVCDEGFQLKGSSASYC
VLAGMESLWNSSVPVCEQIFCPSPPVIPNGRHTGKPLEVFPFGKAVNYTC
DHPDRGTSFDLIGESTIRCTSDPQGNVWSSPAPRCGILGHCQAPDHFL

FAKLKTQTNASDFPIGTSKLYECPREYYGRPFSTICLDNLVWSSPKDVCK
RKSCKTPDPVNGMVHVITDIQVGSRINYSCTTGHRLLIGHSSAECILSGN
TAHWSTKPPICQRIPCGLPPTIANGDFISTNRENHFHYGSVVITYRCNLGSR
GRKVFELVGEPSIYCTSNDDQVGIWSGPAPQCIIPNKCTPPNVENGILVS
DNRSLSFSLNEVVEFRCQPGFVMKGP RRVKCQALNKWEPELPSCSRVCQPP
PEILHGEHTPSHQDNFSPGQEVFYSCEPGYDLRGAASLHCTPQGDWSPEA
PRCAVKSCDDFLGQLPHGRVLFPLNLQLGAKVSFVCDEGFRLKGSSVSHC
VLVGM RSLWNNVVPVCEHIFCPNPPAILNGRHTGTPSGDIPYGKEISYTC
DPHPDRGMTFNLI GESSIRCTSDPHGNGVWSSPAPRCELSVRAGHCKTPE
QFPFASPTIPINDFEFPVGTSLNYECPG YFGKMFISCLLENLVWSSVED
NCRKSCGPPPEPFNGMVHINTDTQFGSTVNYSCNEGFRLIGSPSTTCLV
SGNNVTWDKKAPICEIISCEPPPTISNGDFYSNNRTSFHNGTVVITYQCHT
GPDGEQLFELV GERSIYCTSKDDQVGVWSSPPPRCISTNKCTAPEVENAI
RVPGNRSFFSLTEIIRFRCQPGFVMVGSHTVQCQTNGRWGPKLPHCSRVC
QPPPEILHGEHTLSHQDNFSPGQEVFYSCEPSYDLRGAASLHCTPQGDWS
PEAPRCTVKSCDDFLGQLPHGRVLLPLNLQLGAKVSFVCDEGFRLKGRSA
SHCVLAGMKALWNSSVPVCEQIFCPNPPAILNGRHTGTPFGDIPYGKEIS
YACDTHPDRGMTFNLI GESSIRCTSDPQGNVWSSPAPRCELSVPAACPH
PPKIQNGHYIGGHVSLYLPGMTISYICDPGYLLVGKGFIFCTDQGIWSQL
DHYCKEVNCSFPLFMNGISKELEMKKVYHYGDYVTLKCEDGYTLEGSPWS
QCQADDRWDPPLAKCTSRTHDALIVGTLSGTIFILLIIFLSWII LKHRK
GNAHENPKVAIHLHSQGGSSVHPRTLQTNEENSRLP

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

CR1

Full Name

Complement C3b/C4b receptor 1 (Knops blood group)

Introduction

This gene is a member of the receptors of complement activation (RCA) family and is located in the 'cluster RCA' region of chromosome 1. The genome is polymorphic at this locus with allele-specific splice variants encoding different isoforms, based on the presence/absence of long homologous repeats (LHRs). The gene encodes a monomeric single-pass type I membrane glycoprotein found on erythrocytes, leukocytes, glomerular podocytes, and splenic follicular dendritic cells. The Knops blood group system is a system of antigens located on this protein. The protein mediates cellular binding to particles and immune complexes that have activated complement. Decreases in expression of this protein and/or mutations in this gene have been associated with gallbladder carcinomas, mesangiocapillary glomerulonephritis,

systemic lupus erythematosus, sarcoidosis and Alzheimer's disease. Mutations in this gene have also been associated with a reduction in Plasmodium falciparum rosetting, conferring protection against severe malaria.

Alternative Names

CR1; KN; C3BR; C4BR; CD35; complement receptor type 1; C3-binding protein; C3b/C4b receptor; CD35 antigen; Knops blood group antigen; complement component (3b/4b) receptor 1 (Knops blood group); complement receptor 1; Complement C3b/C4b receptor 1 (Knops blood group)

Gene ID

[1378](#)

UniProt ID

[P17927](#)