abcam

Product datasheet

Recombinant human CD22 protein ab50033

Description

Product name Recombinant human CD22 protein

Biological activity Determined by its ability to inhibit the proliferation of Raji cells. The

expected ED_{50} for this effect is 10-17 µg/mL.

Purity > 95 % SDS-PAGE.

Greater than 98% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per

μg (1EU/μg).

Expression system CHO cells

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence SKWVFEHPET LYAWEGACVW IPCTYRALDG

DLESFILFHN PEYNKNTSKF DGTRLYESTK
DGKVPSEQKR VQFLGDKNKN CTLSIHPVHL
NDSGQLGLRM ESKTEKWMER IHLNVSERPF

PPHIQLPPEI QESQEVTLTC LLNFSCYGYP IQLQWLLEGV

PMRQAAVTST SLTIKSVFTR SELKFSPQWS
HHGKIVTCQL QDADGKFLSN DTVQLNVKHT
PKLEIKVTPS DAIVREGDSV TMTCEVSSSN
PEYTTVSWLK DGTSLKKQNT FTLNLREVTK
DQSGKYCCQV SNDVGPGRSE EVFLQVQYAP
EPSTVQILHS PAVEGSQVEF LCMSLANPLP

TNYTWYHNGK EMQGRTEEKV HIPKILPWHA
GTYSCVAENI LGTGQRGPGA ELDVQYPPKK
VTTVIQNPMP IREGDTVTLS CNYNSSNPSV
TRYEWKPHGA WEEPSLGVLK IQNVGWDNTT
IACARCNSWC SWASPVALNV QYAPRDVRVR
KIKPLSEIHS GNSVSLQCDF SSSHPKEVQF
FWEKNGRLLG KESQLNFDSI SPEDAGSYSC

WVNNSIGQTA SKAWTLEVLY APRRLRVSMS PGDQVMEGKS ATLTCESDAN PPVSHYTWFD WNNQSLPHHS QKLRLEPVKV QHSGAYWCQG

TNSVGKGRSP LSTLTVYYSP ETIGRR

Amino acids 22 to 686

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Specifications

Our **Abpromise guarantee** covers the use of **ab50033** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Functional Studies

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute in water to a concentration of 0.1-1.0 mg/ml

General Info

Function Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid

tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block

signal transduction through dephosphorylation of signaling molecules.

Tissue specificity B-lymphocytes.

Sequence similaritiesBelongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family.

Contains 6 lg-like C2-type (immunoglobulin-like) domains. Contains 1 lg-like V-type (immunoglobulin-like) domain.

DomainContains 4 copies of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based

inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The

phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.

Post-translational modifications

Phosphorylation of Tyr-762, Tyr-807 and Tyr-822 are involved in binding to SYK, GRB2 and SYK,

respectively. Phosphorylation of Tyr-842 is involved in binding to SYK, PLCG2 and

PIK3R1/PIK3R2.

Phosphorylated on tyrosine residues by LYN.

Cellular localization Cell membrane.

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