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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CD23 Protein
Catalog Number: hRP-1064
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human CD23 gene is a B-cell specific antigen, and a low-affinity receptor for IgE. It has essential roles in B cell growth and differentiation, and the regulation of IgE production. This protein also exists as a soluble secreted form, then functioning as a potent mitogenic growth factor. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.

Full-length extracellular domain of human CD23 cDNA (48 - 321 aa, Isoform_A, derived from BC062591) 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: CD23 (FCER2; CLEC4J; FCE2; IGEBF)
Accession Number: NP_001993
Species: Human
Size: 50 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

Edkins,A.L., et al., *Differential regulation of monocyte cytokine release by alphaV and beta(2) integrins that bind CD23*. Immunology 136 (2), 241-251 (2012)

Borthakur,S., et al., *Mapping of the CD23 binding site on immunoglobulin E (IgE) and*



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allosteric control of the IgE-Fc epsilonRI interaction. J. Biol. Chem. 287 (37), 31457-31461 (2012)

Edkins, A.L., et al., *Analysis of the CD23-alphaV integrin interaction: a study with model peptides* JOURNAL Biochem. Biophys. Res. Commun. 422 (2), 207-212 (2012)

Applications

1. May be used for in vitro human CD23-integrin chain mediated monocyte cytokine regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used for protein-protein interaction assay development.
3. As antigen for specific antibody production.

Quality Control

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

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGFEDTTQSLKQLEERAARNVSVSKNLESHHGDQMAQ
KSQSTQISQELEELRAEQRLKSQDLELSWNLNGLQADLSSFKSQELNERNEASDLLERLREEV
TKLRMELQVSSGFVCNTCPEKWINFQRKCYFYGKGTKQVWHARYACDDMEGQLVSIHSPEEQDF
LTKHASHTGSWIGLRNLDLKGFEI WVDGSHVDYSNWAPGEPTSRSQGEDCVMMRGSGRWND AFC
DRKLGAWVCDRLATCTPPASEGSAESMGPDSPDPDGR LPTPSAPLHS