



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant anti-Human CD19 sFV Antibody
Catalog Number: rAB-1762
Manufacturer: LD Biopharma, Inc.

Introduction

Lymphocytes proliferate and differentiate in response to various concentrations of different antigens. The ability of the B cell to respond in a specific, yet sensitive manner to the various antigens is achieved with the use of low-affinity antigen receptors. Human CD19 gene encodes a cell surface molecule, which assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation. Anti-CD19 antibody has been used for purification B cell or targeting B cell derived lymphoma, such as anti-CD19 single chain antibody mediated chimeric antigen receptor modified T cell (CAT-T) technology.

Anti-human CD19 specific Single Chain Variable Fragment Antibody: sFV (Human L-link-H single chain format) gene was constructed using codon optimization gene synthesis technology with 29 aa N-terminal T7 / His / TEV cleavage site 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.

Gene Symbol: Anti-human CD19 sFV
Accession Number: ADM64594
Species: Human
Size: 40 µg / Vial
Composition: 0.4 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Kochenderfer, J.N., et al., *Construction and preclinical evaluation of an anti-CD19 chimeric antigen receptor* J. Immunother. 32 (7), 689-702 (2009)

Kochenderfer, J.N., et al., *Eradication of B-lineage cells and regression of lymphoma in a*



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patient treated with autologous T cells genetically engineered to recognize CD19. Blood 116 (20), 4099-4102 (2010)

Applications

1. As reagent for detection of human CD19 in ELISA or western blot assay.
2. As antigen for generating anti-human CD19 sFV antibody.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGFDIQMTQTTSSLSASLGDRVTISCRASQDISKYLNW
YQQKPDGTVKLLIYHTSRLHSGVPSRFSGSGSGTDYSLTISNLEQEDIATYFCQQGNTLPYTFG
GGTKLEITGSTSGSGKPGSGEGSTKGEVKLQESGPGLVAPSQSLSVTCTVSGVSLPDYGVSWIR
QPPRKGLEWLGVIWGSETTYYNSALKSRLTIKDNSKSQVFLKMNSLQTDDTAIYYCAKHYYYG
GSYAMDYWGQGTSVTVSS