

LD Biopharma, Inc. 9924 Mesa Rim Road Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CD153 Protein

Catalog Number: hRP-0190

Manufacturer: LD Biopharma, Inc.

Introduction

Human CD153 (Tumor necrosis factor ligand superfamily member 8) encodes a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This cytokine is a ligand for TNFRSF8/CD30, which is a cell surface antigen and a marker for Hodgkin lymphoma and related hematologic malignancies. The engagement of this cytokine expressed on B cell surface plays an inhibitory role in modulating Ig class switch. This cytokine was shown to enhance cell proliferation of some lymphoma cell lines, while to induce cell death and reduce cell proliferation of other lymphoma cell lines. The pleiotropic biologic activities of this cytokine on different CD30+ lymphoma cell lines may play a pathophysiologic role in Hodgkin's and some non-Hodgkin's lymphomas. Recent data indicated that measurement of this protein concentration in blood sample may benefits for diagnosis of human lung cancer.

Extracellular domain (63 -234 aa) of recombinant human CD153 protein was constructed with N-terminal tag of 29aa domain, which could be removed using TEV enzyme. This protein was expressed in E. coli as inclusion bodies, refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol: CD153 (CD30 Ligand, TNFSF8)

Accession Number: NP_001235

Species: Human

Size: $20 \mu g / Vial$

Composition: 0.1 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 7 days.

Key References

Gruss,H.J., et al. *Pleiotropic effects of the CD30 ligand on CD30-expressing cells and lymphoma cell lines.* Blood 83 (8), 2045-2056 (1994)



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Ostroff RM, et al. *Unlocking Biomarker Discovery: Large Scale Application of Aptamer Proteomic Technology for Early Detection of Lung Cancer*. PLoS ONE 5 (12): e15003. doi:10.1371/journal.pone.0015003 (2010)

Applications

- 1. Protein function and structure research use.
- 2. Immunogen for specific antibody production.

Quality Control

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

2. Protein activity: Not tested yet.

Recombinant Protein Sequence

29aa_Tag_QRTDSIPNSPDNVPLKGGNCSEDLLCILKRAPFKKSWAYLQVAKHLNKTKLSWNK DGILHGVRYQDGNLVIQFPGLYFIICQLQFLVQCPNNSVDLKLELLINKHIKKQALVTVCESGM QTKHVYQNLSQFLLDYLQVNTTISVNVDTFQYIDTSTFPLENVLSIFLYSNSD