

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 ELTD1 Protein

**Catalog Number:** hRP-1034

**Manufacturer:** LD Biopharma, Inc.

#### Introduction

The superfamily of G-protein coupled receptors (GPCRs) is one of the most diverse families of proteins. The ligands for GPCRs range from ions, organic odorants, amines, peptides, proteins, lipids, nucleotides, and photons, which are all able to activate GPCRs. The superfamily of GPCRs is the most important group of proteins that serves as drug targets. Recently, at least 30 human GPCR proteins with long ser/thr-rich N-terminal domain were identified from human genome. ELTD1 is one of these long N terminal GPCR family members. mRNA profiling data indicated that ELTD1 is dominantly expressed in human smooth muscle and cardiac myocytes.

Extracellular domain of human ELTD1 cDNA (85-432aa, derived from BC025721) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is 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: ELTD1 (ETL; KPG\_003)

**Accession Number:** NP 071442.2

**Species:** Human

Size: 50 µg / Vial

**Composition:** 0.5 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**

T. K. Bjarnadottir, et al., *The Adhesion GPCRs: A unique family of G protein-coupled receptors with important roles in both central and peripheral tissues.* Cell. Mol. Life Sci. 64



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2104 - 2119 (2007)

Nechiporuk, T., et al., ETL, a novel seven-transmembrane receptor that is evelopmentally regulated in the heart. ETL is a member of the secretin family and belongs to the epidermal growth factor-seven-transmembrane Subfamily. J. Biol. Chem. 276 (6), 4150-4157 (2001)

## **Applications**

- 1. May be used for in vitro ELTD1 mediated myocytes differentiation regulation study in various cancer cells with "ProFectin" reagent based intracellular delivery of this protein.
- 2. May be used for protein-protein interaction assay or ligand binging.
- 3. As immunogen for specific antibody production.

# **Quality Control**

Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHHGNLYFQGGEFMCVPGFRSSSNQDRFITNDGTVCIENVNANCHLDN VCIAANINKTLTKIRSIKEPVALLQEVYRNSVTDLSPTDIITYIEILAESSSLLGYKNNTISAK DTLSNSTLTEFVKTVNNFVQRDTFVVWDKLSVNHRRTHLTKLMHTVEQATLRISQSFQKTTEFD TNSTDIALKVFFFDSYNMKHIHPHMNMDGDYINIFPKRKAAYDSNGNVAVAFVYYKSIGPLLSS SDNFLLKPQNYDNSEEEERVISSVISVSMSSNPPTLYELEKITFTLSHRKVTDRYRSLCAFWNY SPDTMNGSWSSEGCELTYSNETHTSCRCNHLTHFAILMSSGPSIGIKDYNILTRITQ