

TECHNICAL DATA SHEET

# Recombinant Human LIGHT (Carrier-free)

Catalog Number: 21-7155

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human LIGHT (Carrier-free)

**DESCRIPTION**

LIGHT, also known as TNFSF14, CD258 and HVEM-L, is a type II transmembrane protein belonging to the TNF family of ligands. It is produced by activated T-cells and signals via the lymphotoxin beta receptor (LTbetaR) and the herpes virus entry mediator (HVEM). It is a potent initiator of T cell co-stimulation signals that play a role in tumor and allograft rejection. LIGHT is reported to work together with IFN-g to activate caspase activity, resulting in cleavage of Bcl-2.

**MOLECULAR MASS**

Recombinant Human LIGHT consists of 177 amino acids and has a calculated molecular weight of 19.3 kDa. By SDS-PAGE, LIGHT migrates between 20.0 -22.5 kDa under non-reducing conditions due to glycosylation.

**AMINO ACID SEQUENCE**

RLGEMVTRLRP DGPAGSWEQL IQERRSHEVN PAAHLTGANS SLTGSGGPLL WETQLGLAFL RGLSYHDGAL VVTKAGYYYI YSKVQLGGVG CPLGLASTIT HGLYKRTPRY PEELELLVSQ QSPCGRATSS SRVWWDSSFL GGVVHLEAGE KVVVRVLDER LVRLRDGTRS YFGAFMV

**SOURCE**

Hi-5 Insect cells

**APPLICATIONS**

Bioassay

**PURITY**

95 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

**BIOACTIVITY**

Its cytotoxic effect, in the presence of human IFN-g, on human colon adenocarcinoma cells (HT-29) is determined.

**RESEARCH AREAS**

TNF Superfamily, Immune System, Apoptosis, Cancer, Inflammation

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Granger SW and Rickert S. 2003. Cytokine Growth Factor Rev. 14(3-4): 289-296. Chen MC, Hsu TL, Luh TY and Hsieh SL. 2000. J Biol Chem. 275(49): 38794-3801. Zhang MC, Liu HP, Demchik LL, Zhai YF and Yang DJ. 2004. Cell Res. 14(2): 117-124.

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