



## PERFORMANCE DATA SHEET

2909

# Human LT $\beta$ R-muIg Fusion Protein\*

For maximal recovery of contents  
please quick spin vial before opening

CATALOG#: 536-020

QUANTITY: 25  $\mu$ g

CONCENTRATION: 0.5 mg/ml

**Molecular Structure:** A soluble fusion protein consisting of 10 residual amino acids from murine CD8 alpha leader sequence (KPQAPELRGS), followed by the mature extracellular (192aa) domain of human LT $\beta$ R (SQPQAVP....PLEPLPP) fused to (233aa) murine IgG2a Fc (EPRGPTI....FSRTPGK). Predicted non glycosylated molecular weight of 48.9 kd.

**Transfectant Cell Line:** CHO

**INFORMATION:** Human Lymphotoxin beta receptor (LT $\beta$ R, TNFSF3) is a member of the TNF receptor superfamily with similarity to CD120a(TNFR1) and CD120b(TNFR2). It is expressed mainly on non lymphoid tissues(1) and appears to have an important role in secondary lymphoid organ development(5). Suppression of LT $\beta$ R signaling can alleviate autoimmunity(2) or exasperate mycobacterial infection(6). Its ligands include Lt $\alpha$  $\beta$ <sub>2</sub> and LIGHT. In mice, LT $\beta$ R signaling is important for development and function of HEV(2), Dendritic cells(3), and Mast cells(4).

Recombinant LT $\beta$ R-muIg fusion protein binds to recombinant human LIGHT in EIA.

**REFERENCES:** 1) T W Mak, M E Saunders eds. *The Immune Response* 2006 Elsevier Academic Press p 499.

2) J L Browning, R.A. Fava, et al. *Immunity* (2005) **23**(5): 539-50. 3) Y Wang, Y Fu, et al. *J Immunol* (2005) **175**: 6997-7002. 4) P Stopfer, T Hehlhans, et al. *J Immunol* (2004) **172**: 7459-7465. 5) Gommermann J, JL Browning, et al, *Nat Rev Immunol* (2003) **3**:642-655. 6) Spahn TW, T Kucharzik, et al. *Infection and Immunity* (2005) **73**(11): 7077-7088.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/Thawing is not recommended.

**PRODUCT STABILITY:** Product should retain activity for at least 6 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

**PRODUCTION:** Recombinant protein from (low FBS containing) tissue culture supernatant of transfectants was purified using affinity and size exclusion chromatography.

**PERFORMANCE:** LT $\beta$ R-muIg identity was confirmed by n-terminal sequencing (KPQAP) and amino acid analysis. LT $\beta$ R-muIg was detectable in EIA (at 50-500 ng/ml) using recombinant human LIGHT coated plate for capture and GAM/HRP as a detector.

\*Research uses only. Not for use in Diagnostic procedures.

Binding of LT $\beta$ R-muIg +GAM/HRP to Immobilized rec huLIGHT

