PERFORMANCE DATA SHEET



Human LTβR-muIg Fusion Protein*

For maximal recovery of contents please quick spin vial before opening

CATALOG#: 536-820 (Preservative Free)

QUANTITY: 25 μg 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 LTβR (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 β R, TNFSF3) is a member of the TNF receptor superfamily with similarilty to CD120a(TNFR1) and CD120b(TNFR2). It is a expressed mainly on non lymphoid tissues(1) and appears to have an important role in secondary lymphoid organ development(5). Suppression of LT β R signaling can alleviate autoimmunity(2) or exasperate mycobacterial infection(6). Its ligands include Lt $\alpha\beta_2$ and LIGHT. In mice, LT β R signaling is important for development and function of HEV(2), Dendritic cells(3), and Mast cells(4).

Recombinant LTβR-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 Hehlgans, 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. Open under aseptic conditions. Freeze/Thawing is not recommended.

PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:______

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl. Product was sterile filtered under aseptic conditions.

PRODUCTION: Recombinant protein from (low FBS containing) tissue culture supernatant of transfectants was purified using affinity and size exclusion chromatography. Product was 0.2µ sterile-filtered and vialed under aseptic conditions

PERFORMANCE: LTβR-muIg identity was confirmed by n-terminal sequencing (KPQAP) and amino acid analysis.

LTβR-muIg was detectable in EIA (at 50-500 ng/ml) using recombinant human LIGHT coated plate for capture and GAM/HRP as a detector.

*This Product is intended for Laboratory Research use only.