

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 MAGEB18 ProteinCatalog Number:hRP-1280Manufacturer:LD Biopharma, Inc.

#### Introduction

Human Lymphokine-activated killer T-cell-originated protein kinase (PBK) gene encodes a serine / threonine protein kinase related to the dual specific mitogen-activated protein kinase kinase (MAPKK) family. Evidence suggests that mitotic phosphorylation is required for its catalytic activity. The encoded protein may be involved in the activation of lymphoid cells and support testicular functions, with a suggested role in the process of spermatogenesis. Overexpression of this gene has been implicated in tumorigenesis. Recent data indicated that PBK phosphorylates MAP kinase p38, and also be complexed with p53 protein for regulating G2/M checkpoint during doxorubicin-induced DNA damage.

Full-length human MAGEB18 cDNA (2 – 343 aa, derived from BC029525) 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:	MAFEB18
Accession Number:	NP_775970
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, arginine, DTT and Sucrose.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.



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

Lim, J., et al., A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. Cell 125 (4), 801-814 (2006)

## Applications

**Key References** 

- 1. May be used for in vitro MAGEB18 protein mediated germ cell, embryonic development regulation or tumor cell transformation study with "ProFectin" based intracellular delivery of this protein.
- 2. May be used for MAGEB18 protein protein interaction assay.
- 3. As Enzymatic substrate for various proteases.
- 4. Potential diagnostic biomarker protein for various cancer or auto-antingen for various auto-immuno-diseases.
- 5. May be used for specific antibody production.

### **Quality Control**

Purity: > 90% by SDS-PAGE.

#### **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHHENLYFQGGEFPRGQKSKLRAREKRHQARCENQDLGATQATVAEGE SPSSAYLLFGDRPQNLPAAETPSIPEALQGAPSTTNAIAPVSCSSNEGASSQDEKSLGSSREAE GWKEDPLNKKVVSLVHFLLQKYETKEPITKGDMIKFVIRKDKCHFNEILKRASEHMELALGVDL KEVDPIRHYYAFFSKLDLTYDETTSDEEKIPKTGLLMIALGVIFLNGNRAPEEAVWEIMNMMGV YADRKHFLYGDPRKVMTKDLVQLKYLEYQQVPNSDPPRYEFLWGPRAHAETSKMKVLEFVAKIH DTVPSAFPSCYEEALRDEEQRTQARAAARAHTAAMANARSRTTSSSFSHAK