

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 MAGEA6 Protein

Catalog Number: hRP-1292

Manufacturer: LD Biopharma, Inc.

Introduction

Human melanoma-associated antigen A6 (MAGEA6) gene is a member of the MAGEA gene family. The promoters and first exons of the MAGEA genes show considerable variability, suggesting that the existence of this gene family enables the same function to be expressed under different transcriptional controls. MAGEA6 normally only expressed in testes, but detected in many tumor cells. This protein is a good candidate target for potential cancer vaccine development or used as biomarker protein for early cancer diagnostic application.

Full-length human MAGEA6 cDNA (2 – 314 aa, which derived from BC067731) 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: MAGEA6 (MAGE-3b; MGC52297)

Accession Number: NP_005354

Species: Human

Size: $50 \mu g / Vial$

Composition: 1.0 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.

Key References

Akiyama Y, et al., Identification of novel MAGE-A6- and MAGE-A12-derived HLA-A24-



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restricted cytotoxic T lymphocyte epitopes using an in silico peptide-docking assay. Cancer Immunol. Immunother. 61 (12), 2311-2319 (2012)

Shin KC, et al., MAGE A1-A6 RT-PCR and MAGE A3 and p16 methylation analysis in induced sputum from patients with lung cancer and non-malignant lung diseases. Oncol. Rep. 27 (4), 911-916 (2012)

Ries J, et al., *Expression of melanoma-associated antigens in oral squamous cell carcinoma*. J. Oral Pathol. Med. 37 (2), 88-93 (2008)

Applications

- 1. May be used for in vitro MAGEA6 protein mediated ubiquitin ligase activities regulation in embryonic development or tumor cell transformation study with "ProFectin" based intracellular delivery of this protein.
- 2. May be used for MAGEA6 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

MASMTGGQQMGRGHHHHHHENLYFQGGEFPLEQRSQHCKPEEGLEARGEALGLVGAQAPATEEQ EAASSSSTLVEVTLGEVPAAESPDPPQSPQGASSLPTTMNYPLWSQSYEDSSNQEEEGPSTFPD LESEFQAALSRKVAKLVHFLLLKYRAREPVTKAEMLGSVVGNWQYFFPVIFIKASDSLQLVFGI ELMEVDPIGHVYIFATCLGLSYDGLLGDNQIMPKTGFLIIILAIIAKEGDCAPEEKIWEELSVL EVFEGREDSIFGDPKKLLTQYFVQENYLEYRQVPGSDPACYEFLWGPRALIETSYVKVLHHMVK ISGGPRISYPLLHEWALREGEE