



LD Biopharma, Inc.
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Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human EPCAM (24-265aa) Protein
Catalog Number: hRP-0340
Manufacturer: LD Biopharma, Inc.

Introduction

Human EPCAM (Epithelial Cell Adhesion molecular Precursor) is a 314 amino acid protein (1-23 = signal domain), which is a carcinoma-associated antigen and belongs to a member of a family that includes at least two type I membrane proteins. This antigen is expressed on most normal epithelial cells and gastrointestinal carcinomas and functions as a homotypic calcium-independent cell adhesion molecule. The antigen is being used as a target for immunotherapy treatment of human carcinomas. Anti-EpCam antibody is the most popular biomarker reagent for identifying CTC (Circulating Tumor Cells). Cell culture plates coated with recombinant human EpCam protein (extracellular domain) may benefit isolation of cancer cells from blood samples.

Recombinant human EPCAM gene (24-265 aa Fragment) was constructed with codon optimization and expressed with N-terminal 29aa tag domain (which could be removed using TEV enzyme) 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: EPCAM (CD326; EGP-2; EGP314; EGP40; ESA; TACSTD1)
Accession Number: NP_002345.2
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 Glycerol.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.



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Key References

Deng G, et al. *Enrichment with anti-cytokeratin alone or combined with anti-EpCAM antibodies significantly increases the sensitivity for circulating tumor cell detection in metastatic breast cancer patients.* Breast Cancer Res. 10 (4) R69 (2008)

Strnad, J., et al. *Molecular cloning and characterization of a human adenocarcinoma / epithelial cell surface antigen complementary DNA.* Cancer Res. 49 (2), 314-317 (1989)

Applications

1. Used as coating matrix protein for Studying ES or iPS cell differentiation in vitro.
2. As native antigen for antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFQEEVCENYKLAVNCFVNNRQCQCTSVGAQNTVI
CSKLAAKCLVMKAEMNGSKLGRRAKPEGALQNNGLYDPCDESGLFKAKQCNGTSMCWCVNTA
GVRRTDKDTEITCSERVRTYWI I I ELKHKAREKPYDSKSLRTALQKEITTRYQLDPKFITSILY
ENNVITIDL VQNSSQKTQNDVDIADVAYYFEKDKGESLFHSSKMDLTVNGEQLDLDPGQTLIY
YVDEKAPEFSMQGLK