



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Adenovirus E4ORF1-11R Protein
Catalog Number: vRP-1487
Manufacturer: LD Biopharma, Inc.

Introduction

Adenovirus E4 mRNA contains 7 ORFs, suggesting that E4 encodes at least 6 gene products (E4ORF1–E4ORF6/7). Among the known E4 ORFs, E4ORF1 primarily affects survival but not cell proliferation. Recent data indicated that by transfection of E4ORF1 gene into human primary endothelial cells (PECs), it facilitate organ-specific purification of PECs, while preserving their vascular repertoire for months in serum/ cytokine free culture.

Full-length adenovirus E4orf1 (128 aa) gene was constructed by DNA synthesis using codon optimization technology with 29 aa N-terminal T7 / His / TEV cleavage site Tag and 11R tag at C-terminal. It was 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: E4ORF1
Accession Number: NP_597756
Species: Adenovirus
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, Sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Marco Sendel et al., *Generation of a functional and durable vascular niche by the adenovirus E4ORF1 gene*. PNAS. Vol. 105, 19288-19293. (2008).



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Applications

1. May be used for in vitro adenovirus E4ORF1 mediated human endothelial cell differentiation regulation study by intracellular delivery of this protein.
2. May be used for mapping E4ORF1 protein-protein interaction.
3. May be used as specific substrate protein for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
4. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHENLYFQGEFAAAVEALYVVLEREGAILPRQEGFSGVYVFFSPINF
VIPPMGAVMLSLRLRVCIPPGYFGRFLALTDVNQPDVFTESYIMTPDMTEELSVVLFNHGDQFF
YGHAGMAVRLMLIRVVFPVVRQASNVLESGGGGSPGRRRRRRRRRR