

# **Recombinant Human OTOR**

**CATALOG #:** 4987-20 20 μg 4987-1000 1 mg

LOT#:

SYNONYMS: Otoraplin, Fibrocyte-derived protein, Melanoma inhibitory

activity-like protein, OTOR, MIAL, FDP, MIAL1, MGC126737,

MGC126739

SOURCE: E. coli

**PURITY:** >98% by SDS-PAGE and HPLC analyses

Endotoxin level is <0.1 ng/µg of human OTOR.

MOLECULAR WT: 12.7 kDa

FORM: The OTOR protein was lyophilized from a concentrated (1

mg/ml) solution containing 20 mM PBS pH-7.4 and 130 mM

NaCl.

#### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile dH2O to a concentration of 0.1 -1 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or –20°C for future use.

#### STORAGE CONDITIONS:

The lyophilized human OTOR is best-stored desiccated below 0°C. Reconstituted OTOR should be stored in working aliquots at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

## **DESCRIPTION:**

TOR proteins is also known as fibrocyte-derived protein (Fdp) and Melanoma inhibitory activity-like (MIAL). Otoraplin is a member of the melanoma-inhibiting activity gene family. Otoraplin is a secreted 16 kDa globular protein that is expressed in the inner ear by periotic mesenchyme and developing and mature fibrocytes. OTOR is highly homologous to MIA/cartilage-derived retinoic acid-sensitive protein (CD-RAP), which is a cartilage-specific protein that is also expressed in malignant melanoma cells. The 111 amino acid mature human otoraplin contains 1 SH3 domain (46 –107 amino acids) and a Tyr at position 50 that is reportedly sulfated. Otoraplin takes part in the initiation of periotic mesenchyme chondrogenesis. Otoraplin is secreted through the Golgi apparatus and plays a role in cartilage development and maintenance. A frequent polymorphism in the translation start codon of OTOR can abolish translation and may be associated with forms of deafness. Recombinant human Otoraplin produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 111 amino acids and having a molecular mass of 12.7 kDa. The OTOR is purified by proprietary chromatographic techniques.

## FOR RESEARCH USE ONLY! Not to be used on humans.

#### RELATED PRODUCTS:

rev. 10/09

## Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

## Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

# Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

# Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## **Growth Factors and Cytokines**

Monoclonal and Polyclonal Antibodies