



## Product Datasheet

<b>Product Name</b>	Otoraplin Human Recombinant
<b>Cata No</b>	CB501316
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Otoraplin, Fibrocyte-derived protein, Melanoma inhibitory activity-like protein, OTOR, MIAL, FDP, MIAL1, MGC126737, MGC126739

### Description

OTOR 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.

Otoraplin Human Recombinant 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.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried)

powder.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

The OTOR protein was lyophilized from a concentrated (1mg/ml) solution containing 20mM PBS pH-7.4 and 130mM NaCl.

### Reconstitution

It is recommended to reconstitute the lyophilized Otoraplin in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized OTOR Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution OTOR should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

VHGIFMDRLASKKLCADDECVTISLASAQEDYNA  
PDCRFINVKKGQQIYVYS  
KLVKENGAGEFWAGSVYGDGQDEMGGVGYFPR  
NLVKEQRVYQEATKEVPTT  
DIDFFCE

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