

Otoraplin (OTOR), human recombinant protein

Otoraplin, Fibrocyte-derived protein, Melanoma inhibitory activity-like protein, OTOR, MIAL, FDP, MI Catalog # PBV10521r

Specification

Otoraplin (OTOR), human recombinant protein - Product info

Primary Accession	<u>Q9NRC9</u>
Calculated MW	12.7 kDa KDa

Otoraplin (OTOR), human recombinant protein - Additional Info

Gene ID 56914 Gene Symbol OTOR Other Names Otoraplin, Fibrocyte-derived protein, Melanoma inhibitory activity-like protein, OTOR, MIAL, FDP, MIAL1, MGC126737, MGC126739,

Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥98%
Assay2&Purity2	HPLC; ≥98%
Recombinant	Yes
Application Notes	

Reconstitute in sterile dH₂O to a concentration of 0.1 -1 mg/ml. This solution can then be diluted into other aqueous buffers

Format Lyophilized protein

Storage -20°C; Sterile filtered and lyophilized from a concentrated (1 mg/ml) solution containing 20 mM PBS pH-7.4 and 130 mM NaCl.

Otoraplin (OTOR), human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Otoraplin (OTOR), human recombinant protein - Images



Otoraplin (OTOR), human recombinant protein - Background

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.

Otoraplin (OTOR), human recombinant protein - References

Robertson N.G., et al.Genomics 66:242-248(2000). Cohen-Salmon M., et al.J. Biol. Chem. 275:40036-40041(2000). Rendtorff N.D., et al.Genomics 71:40-52(2001). Clark H.F., et al.Genome Res. 13:2265-2270(2003). Deloukas P., et al.Nature 414:865-871(2001).