

### Recombinant rat FGF10 protein ab203715

#### Description

<b>Product name</b>	Recombinant rat FGF10 protein
<b>Biological activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using monkey 4MBr-5 cells is less than 120 ng/ml, corresponding to a specific activity of $> 8.3 \times 10^3$ IU/mg.
<b>Purity</b>	> 97 % SDS-PAGE. > 97 % by HPLC.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P70492</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Rat
<b>Sequence</b>	QALGQDMVSPEATNSSSSSSSSSSSSSFSSPSSAGRHV RSYNHLQGDVRW RKLSFTKYFLKIEKNGKVSGTKKENCYPYSILEITSVEIGVV AVKAINSN YYLAMNKKGKLYGSKEFNNDCKLKERIEENGYN TYASFNW QHNGRQMYVA LNGKGAPRRGQKTRRKNTSAHFLPMVVHS
<b>Predicted molecular weight</b>	20 kDa
<b>Amino acids</b>	37 to 215
<b>Additional sequence information</b>	This product is for the mature full length protein. The signal peptide is not included.

#### Specifications

Our **Abpromise guarantee** covers the use of **ab203715** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE HPLC Functional Studies
<b>Form</b>	Lyophilized

## Preparation and Storage

---

### Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 5% Trehalose, 2.9% Sodium chloride, 0.24% Tris

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### Reconstitution

Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

## General Info

---

### Function

Could be a growth factor active in the process of wound healing. Acts as a mitogen in the lung. May act in a manner similar to FGF-7.

### Involvement in disease

Defects in FGF10 are the cause of autosomal dominant aplasia of lacrimal and salivary glands (ALSG) [MIM:180920]. ALSG has variable expressivity, and affected individuals may have aplasia or hypoplasia of the lacrimal, parotid, submandibular and sublingual glands and absence of the lacrimal puncta. The disorder is characterized by irritable eyes, recurrent eye infections, epiphora (constant tearing) and xerostomia (dryness of the mouth), which increases the risk of dental erosion, dental caries, periodontal disease and oral infections.

Defects in FGF10 are a cause of lacrimo-auriculo-dento-digital syndrome (LADDs) [MIM:149730]; also known as Levy-Hollister syndrome. LADDs is a form of ectodermal dysplasia, a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. LADDs is an autosomal dominant syndrome characterized by aplastic/hypoplastic lacrimal and salivary glands and ducts, cup-shaped ears, hearing loss, hypodontia and enamel hypoplasia, and distal limb segments anomalies. In addition to these cardinal features, facial dysmorphism, malformations of the kidney and respiratory system and abnormal genitalia have been reported. Craniosynostosis and severe syndactyly are not observed.

### Sequence similarities

Belongs to the heparin-binding growth factors family.

### Cellular localization

Secreted.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors