

Recombinant rat FGF2 protein ab64442

Description

Product name	Recombinant rat FGF2 protein
Biological activity	Determined by a cell proliferation assay using Balb/c 3T3 cells. The expected ED ₅₀ is ≤ 0.2 ng/ml, corresponding to a specific activity of ≥ 5 x 10 ⁶ units/mg.
Purity	> 95 % SDS-PAGE. Purity is greater than 95% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per µg (1EU/µg).
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Rat
Sequence	PALPEDGGGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD GVREKSDPHV KLQLQAEERG VVSIGVCAN RYLAMKEDGR LLASKCVTEE CFFFERLESN NYNTYRSRKY SSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS
Amino acids	10 to 154

Specifications

Our **Abpromise guarantee** covers the use of **ab64442** in the following tested applications.

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

Applications	SDS-PAGE
	Functional Studies

Form	Lyophilized
-------------	-------------

Preparation and Storage

Stability and Storage	Upon reconstitution add a carrier protein (0.1% BSA). Store at -20°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA). Working aliquots stored with a carrier protein are stable for at least 3 months at -20°C to -80°C..
------------------------------	--

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

Reconstitution

For lot specific reconstitution information please contact our Scientific Support Team.

General Info

Function	Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro. Can induce angiogenesis (PubMed:23469107).
Tissue specificity	Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.
Sequence similarities	Belongs to the heparin-binding growth factors family.
Post-translational modifications	Phosphorylation at Tyr-215 regulates FGF2 unconventional secretion. Several N-termini starting at positions 94, 125, 126, 132, 143 and 162 have been identified by direct sequencing.
Cellular localization	Secreted. Nucleus. Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane. Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol. Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57.

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