abcam

Product datasheet

Recombinant human FGF2 protein (Active) ab9596

★★★★★ 2 Abreviews 4 References 2 图像

描述

产品名称 重组人FGF2蛋白(Active)

生物活性 Determined by a cell proliferation assay using Balb/c 3T3 cells.

The expected **ED**₅₀ is \leq 0.1 ng/ml, corresponding to a specific activity of \geq 1 x 10⁷ units/mg.

纯**度** >= 95 % SDS-PAGE.

>= 95% HPLC Sterile filtered

内毒素水平 < 1.000 Eu/µg

表达系统 Escherichia coli

Accession P09038

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 AAGSITTLP ALPEDGGSGA FPPGHFKDPK RLYCKNGGFF

LRIHPDGRVD GVREKSDPHI KLQLQAEERG
VVSIKGVCAN RYLAMKEDGR LLASKCVTDE
CFFFERLESN NYNTYRSRKY TSWYVALKRT

GQYKLGSKTG PGQKAILFLP MSAKS

预测分子量 17 kDa

氨基酸 135 to 288

技术指标

Our **Abpromise guarantee** covers the use of **ab9596** in the following tested applications.

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

应用 Cell Differentiation

SDS-PAGE

Cellular Activation

HPLC

形式 Lyophilized

1

制备和贮存

稳定性和存储 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Constituents: 0.0605% Tris, 0.87% Sodium chloride

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

复溶 Please reconstitute this product in 500ul 5mM Tris, pH7.6.

常规信息

功能 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).

组织特异性 Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in

non-cancerous liver tissue.

序列相似性 Belongs to the heparin-binding growth factors family.

翻译后修饰 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.

细胞定位 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

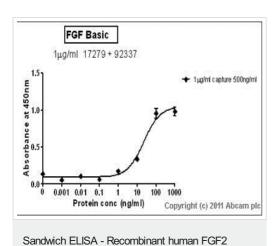
translocation of FGF2 across endosomal membrane into the cytosol. Nuclear import from the

 $\hbox{cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as }$

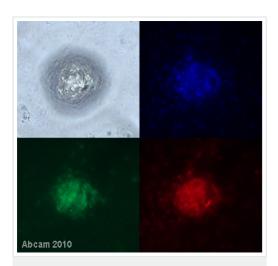
well as CEP57.

图片

protein (ab9596)



Standard Curve for FGF basic (Analyte: <u>FGF basic protein</u> (Active) (ab9596)); dilution range 1pg/ml to 1ug/ml using Capture Antibody <u>Mouse monoclonal [AS24] to FGF basic (ab17279)</u> at 1ug/ml and Detector Antibody <u>Rabbit monoclonal [EP1735] to FGF basic (ab92337)</u> at 0.5ug/ml.



Cell differentiation - Recombinant human FGF2 protein (ab9596)

This image is courtesy of Sun Yung, Centro de Investigación Príncipe Felipe.

Human embryonic stem cells (H9) were differentiated both as embryoid bodies and monolayer cultures (on Matrigel) using a protocol described in Kennedy et al., 2007. BMP-4, FGF-basic (ab9596) and VEGF (ab9571) were sequentially added to the media to direct differentiation. These images were taken at day 8, where cell adhesion antigens CD31 (ab32457 in green) and CD34 (ab8536 in red) are abundant and represent primitive haematopoietic cells within the culture. Dapi staining is shown in blue.

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.cn/abpromise or contact our technical team.

Terms and conditions

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