abcam

Product datasheet

Recombinant rat FGF9/GAF protein ab9745

Description

Product name	Recombinant rat FGF9/GAF protein
Biological activity	Determined by dose-dependent ability to reduce tetrazolium salt, WST-8, by dehydrogenase activities of BaF3 cells expressing FGF receptors using Cell Counting Kit-8 (CCK-8).
Purity	> 95 % SDS-PAGE. Sterile filtered Greater than 95% pure by HPLC analyses. Endotoxin level is less than 0.1 ng per g (1EU/g).
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Rat
Predicted molecular weight	23 kDa

Specifications

Our **Abpromise guarantee** covers the use of **ab9745** in the following tested applications.

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

Applications	Functional Studies SDS-PAGE
Form	Lyophilized
Additional notes	mFGF-9 is fully biologically active when compared to standards. The ED50, as determined by the dose-dependent stimulation of thymidine uptake by BaF3 expressing FGF receptors, is less than 0.5 ng/ml, corresponding to a specific activity of >2 X 106 units/mg. Murine FGF-9 exerts full activity on both murine and human cells. For most in vitro applications, FGF-9 exerts its biological activity in the concentration range of 0.1 to 20.0 ng/ml. Previously labelled as FGF9.

Preparation and Storage

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

Reconstitution	Reconstitute using 50ul of sterile H20.

General Info

Function	May have a role in glial cell growth and differentiation during development, gliosis during repair and regeneration of brain tissue after damage, differentiation and survival of neuronal cells, and growth stimulation of glial tumors.
Tissue specificity	Glial cells.
Involvement in disease	Defects in FGF9 are the cause of multiple synostoses syndrome type 3 (SYNS3) [MIM:612961]. Multiple synostoses syndrome is an autosomal dominant condition characterized by progressive joint fusions of the fingers, wrists, ankles and cervical spine, characteristic facies and progressive conductive deafness.
Sequence similarities	Belongs to the heparin-binding growth factors family.
Post-translational modifications	Three molecular species were found (30 kDa, 29 kDa and 25 kDa), cleaved at Leu-4, Val-13 and Ser-34 respectively. The smaller ones might be products of proteolytic digestion. Furthermore, there may be a functional signal sequence in the 30 kDa species which is uncleavable in the secretion step. N-glycosylated.
Cellular localization	Secreted.

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