abcam

Product datasheet

Recombinant mouse IGF2 protein (Animal Free) ab233634

2 Images

Description

Product name Recombinant mouse IGF2 protein (Animal Free)

Biological activity FDC-P1 cell proliferation. $ED_{50} \le 50 \text{ ng/ml}$ ($\ge 2.0 \times 10^4 \text{ units/mg}$).

Purity > 95 % SDS-PAGE.

Expression system <=1.000 Eu/µg
Expression system

Accession P09535

Protein length Full length protein

Animal free Yes

Nature Recombinant

Species Mouse

Sequence AYGPGETLCGGELVDTLQFVCSDRGFYFSRPSSRANRRS

RGIVEECCFRS CDLALLETYCATPAKSE

Predicted molecular weight 7 kDa

Amino acids 25 to 91

Additional sequence information This product is the mature full length protein from aa 25 to 91. The signal peptide is not included

Specifications

Our Abpromise guarantee covers the use of ab233634 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

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -20°C.

1

Constituent: 0.1% Trifluoroacetic acid

Lyophilized from a sterile (0.2 micron) filtered aqueous solution.

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

Reconstitution

Centrifuge vial before opening. Reconstitute with sterile water at 0.1 mg/ml. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

General Info

Function The insulin-like growth factors possess growth-promoting activity. In vitro, they are potent

mitogens for cultured cells. IGF-II is influenced by placental lactogen and may play a role in fetal

development.

Preptin undergoes glucose-mediated co-secretion with insulin, and acts as physiological amplifier of glucose-mediated insulin secretion. Exhibits osteogenic properties by increasing osteoblast mitogenic activity through phosphoactivation of MAPK1 and MAPK3.

Involvement in disease

Epigenetic changes of DNA hypomethylation in IGF2 are a cause of Silver-Russell syndrome (SIRS) [MIM:180860]. SIRS is a clinically heterogeneous condition characterized by severe intrauterine growth retardation, poor postnatal growth, craniofacial features such as a triangular shaped face and a broad forehead, body asymmetry, and a variety of minor malformations.

Sequence similarities

Belongs to the insulin family.

Post-translational

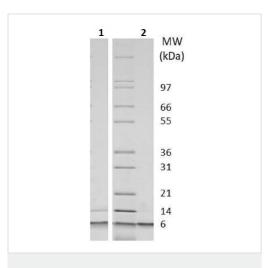
modifications

O-glycosylated with a core 1 or possibly core 8 glycan.

Cellular localization

Secreted.

Images

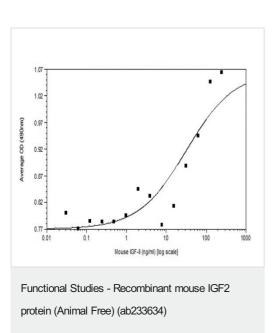


SDS-PAGE - Recombinant mouse IGF2 protein (Animal Free) (ab233634)

 $1~\mu g$ ab233634 analyzed on a 4-20% Tris-Glycine gel, stained with Coomassie Blue.

Lane 1: Non-reducing conditions.

Lane 2: Reducing conditions.



ab233634 induced proliferation of FDC-P1 cells.

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

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