abcam

Product datasheet

Recombinant human AMF protein (Bioactivity Validated) ab208311

2 References 1 Image

Description

Product name Recombinant human AMF protein (Bioactivity Validated)

Biological activity Specific activity is > 400 units/mg obtained by measuring the increase of NADPH in absorbance

at 340 nm resulting from the reduction of NADP. One unit will convert 1.0 umole of D-Fructose 6-

phosphate to D-glucose 6-phosphate per minute at pH 7.4 at 37C.

Purity > 95 % SDS-PAGE.

ab208311 was purified by using conventional chromatography techniques.

Endotoxin level < 1.000 Eu/µg

Expression system Escherichia coli

Accession P06744

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MGSSHHHHHHSSGLVPRGSHMAALTRDPQFQKLQQWYR

EHRSELNLRRLF

DANKDRFNHFSLTLNTNHGHILVDYSKNLVTEDVMRMLVD

LAKSRGVEAA

RERMFNGEKINYTEGRAVLHVALRNRSNTPILVDGKDVMP

EVNKVLDKMK

 ${\tt SFCQRVRSGDWKGYTGKTITDVINIGIGGSDLGPLMVTEAL}$

KPYSSGGPR

VWYVSNIDGTHIAKTLAQLNPESSLFIIASKTFTTQETITNAE

TAKEWFL

QAAKDPSAVAKHFVALSTNTTKVKEFGIDPQNMFEFWDW

VGGRYSLWSAI

GLSIALHVGFDNFEQLLSGAHWMDQHFRTTPLEKNAPVLL

ALLGIWYINC

FGCETHAMLPYDQYLHRFAAYFQQGDMESNGKYITKSGTR

VDHQTGPIVW

GEPGTNGQHAFYQLIHQGTKMIPCDFLIPVQTQHPIRKGLH

HKILLANFL

AQTEALMRGKSTEEARKELQAAGKSPEDLERLLPHKVFE

1

GNRPTNSIVFT

KLTPFMLGALVAMYEHKIFVQGIIWDINSFDQWGVELGKQL AKKIEPELD GSAQVTSHDASTNGLINFIKQQREARVQ

Predicted molecular weight 62 kDa including tags

Amino acids 1 to 558

Tags His tag N-Terminus

Additional sequence information NP 000166

Description Recombinant human AMF protein

Specifications

Our Abpromise quarantee covers the use of ab208311 in the following tested applications.

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

Applications Mass Spectrometry

SDS-PAGE

Functional Studies

Mass spectrometry MALDI-TOF

Form Liquid

Additional notes This product was previously labelled as Glucose 6 phosphate isomerase

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.

pH: 8.00

Constituents: 0.32% Tris HCI, 0.02% DTT, 10% Glycerol (glycerin, glycerine)

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

General Info

Function Besides it's role as a glycolytic enzyme, mammalian GPI can function as a tumor-secreted

cytokine and an angiogenic factor (AMF) that stimulates endothelial cell motility. GPI is also a

neurotrophic factor (Neuroleukin) for spinal and sensory neurons.

Pathway Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate

from D-glucose: step 2/4.

Involvement in disease Defects in GPI are the cause of hemolytic anemia non-spherocytic due to glucose phosphate

isomerase deficiency (HA-GPID) [MIM:613470]. It is a form of anemia in which there is no abnormal hemoglobin or spherocytosis. It is caused by glucose phosphate isomerase deficiency. Severe GPI deficiency can be associated with hydrops fetalis, immediate neonatal death and

neurological impairment.

Sequence similarities Belongs to the GPI family.

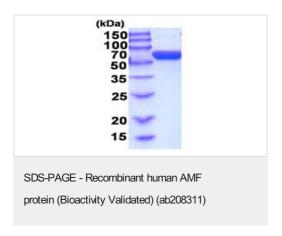
Post-translational Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may

modifications contribute to secretion by a non-classical secretory pathway.

ISGylated.

Cellular localization Cytoplasm. Secreted.

Images



15% SDS-PAGE analysis of 3 µg ab208311.

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