

Recombinant human FB Pase 1 protein

Catalog Number: ATGP3234

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-338aa

UniProt No.

P09467

NCBI Accession No.

NP_000498.2

Alternative Names

FBPase1, FBP, FBP1

PRODUCT SPECIFICATION

Molecular Weight

39.0 kDa (358aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 7,000pmol/min/ug obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NADP. One unit will oxidize 1.0pmole of fructose 1,6 diphosphate to fructose 6-phosphate and inorganic phosphate per minute at pH 9.5 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Fructose-1, 6-bisphosphatase 1 (FBP1) is a gluconeogenesis regulatory enzyme, catalyzes the hydrolysis of fructose 1, 6-bisphosphate to fructose 6-phosphate and inorganic phosphate. Fructose-1, 6-diphosphatase

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deficiency is associated with hypoglycemia and metabolic acidosis. Recombinant FBP1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MADQAPFDTD VNTLTRFVME EGRKARGTGE LTQLLSLCT AVKAISSAVR
KAGIAHLYGI AGSTNVTGDQ VKKLDVLSND LVMNMLKSSF ATCVLVSEED KHAIIVEPEK RGKYVVC FDP LDGSSNIDCL
VSVGTFIGIY RKKSTDEPSE KDALQPGRNL VAAGYALYGS ATMLVLAMDC GVNCFM L DPA IGEFILVDKD VKIKKKGKIY
SLNEGYARDF DPAVTEYIQR KKFPPDNSAP YGARYVGSMV ADVHRTL VYG GIFLYPANKK SPNGKLRLLY ECNPMAYVME
KAGGMATTGK EAVLDVIPTD IHQRAPVILG SPDDVLEFLK VYEK HSAQ

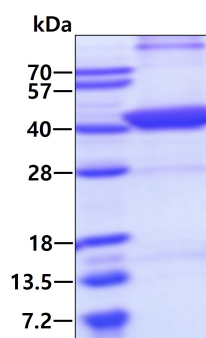
General References

Rabenhorst U., et al. (2009) Hepatology. 50(4):1121-9.

Hirota K., et al. (2008) Nature. 456(7218):130-4.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.