

32-6744: FBP1 Human, Active

Application : Functional Assay

Alternative Name : Fructose-1,6-bisphosphatase 1, FBPase 1, D-fructose-1,6-bisphosphate 1-phosphohydrolase 1, Liver FBPase, FBP1, FBP.

Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

FBP1 or Fructose-1, 6-bisphosphatase 1 is an enzyme, catalyzing the formation of fructose 6-phosphate & inorganic phosphate from fructose 1, 6-bisphosphate. FBP1 is part of the gluconeogenesis regulatory enzymes. Mutations in the enzyme gene can result in metabolic acidosis & hypoglycemia.

FBP1 Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 358 amino acids (1-338) and having a molecular mass of 39.0 kDa. FBP1 is fused to a 20 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : FBP1 protein solution (1mg/ml) contains 1mM DTT, 10% glycerol and 20mM Tris-HCl buffer (pH 8.0).

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MADQAPFDTD VNTLTRFVME EGRKARGTGE LTQLLNSLCT
AVKAISSAVR KAGIAHLYGI AGSTNVTGDQ VKKLDVLSND LVMNMLKSSF ATCVLVSEED
KHAIIVEPEK RGKYVVC FDP LDGSSNIDCL VSVGTIFGIY RKKSTDEPSE KDALQPGRNL
VAAGYALYGS ATMLVLAMDC GVNCFMLDPA IGEFILVDKD VKIKKKGKIY SLNEG YARDF
DPAVTEYIQR KKFPPDNSAP YGARYVGSMV ADVHRTL VYG GIFLYPANKK SPNGKLRLLY
ECNPMAYVME KAGGMATTGK EAVLDVIPTD IHQ RAPVILG SPDDVLEFLK VYEK HSAQ

Application Note

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