

Recombinant FBPase1 protein

Catalog No: 81306, 81606

Expressed In: *E. coli*

Quantity: 50, 1000 µg

Concentration: 1.3 µg/µl

Source: Human

Buffer Contents: Recombinant FBPase1 protein is supplied in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 10% glycerol and 0.5 mM TCEP.

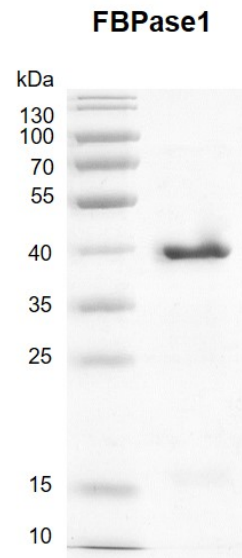
Background: FBPase1 (D-Fructose-1,6-Bisphosphate 1-Phosphohydrolase 1), also called as FBP1, is a gluconeogenesis regulatory enzyme. It catalyzes the hydrolysis of fructose 1,6-bisphosphate to fructose 6-phosphate in the presence of divalent cations, acting as a rate-limiting enzyme in gluconeogenesis. FBPase1 plays a role in regulating glucose sensing and insulin secretion of pancreatic beta-cells. It appears to modulate glycerol gluconeogenesis in liver and to be an important regulator of appetite and adiposity. Increased expression of the protein in liver after nutrient excess increases circulating satiety hormones and reduces appetite-stimulating neuropeptides and thus seems to provide a feedback mechanism to limit weight gain. Diseases associated with FBPase1 include Fructose-1,6-Bisphosphatase Deficiency and Metabolic Acidosis. Among its related pathways are Glucose metabolism and Carbon metabolism.

Protein Details: Recombinant FBPase1 protein was expressed in *E. Coli* cells as the full length protein (accession number NP_000498.2) with a C-terminal 6×His-Tag. The molecular weight of the protein is 37.9 kDa.

Application Notes: Recombinant FBPase1 protein is used to catalyze the hydrolysis of fructose 1,6-bisphosphate to fructose 6-phosphate in the presence of divalent cations.

This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of arrival.



Recombinant FBPase1 protein gel
12.5% SDS-PAGE gel with Coomassie blue staining

MW: 37.9 kDa

Purity: >90%