OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

# AR51989PU-N Human FBP1 (1-338, His-tag) - Purified

**Alternate names:** 6-bisphosphatase 1, 6-bisphosphate 1-phosphohydrolase 1, D-fructose-1, FBP, FBPase 1, Fructose-1

**Quantity:** 0.1 mg

**Concentration:** 1.0 mg/ml (determined by bradford assay)

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

**Uniprot ID:** P09467

**NCBI:** NP_000498.2

**GeneID:** 2203

**Species:** Human

**Source:** E. coli

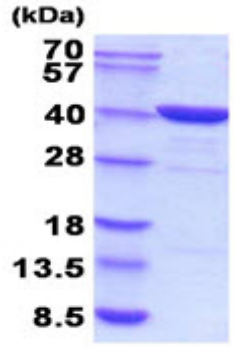
**Format:**
**State:** Liquid purified protein
**Purity:** >90% by SDS - PAGE
**Buffer System:** 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 10% glycerol.

**Description:**
**AA Sequence:**
MGSSHHHHHH SSGLVPRGSH MADQAPFDTD VNTLTRFVME EGRKARGTGE LTQLLNSLCT AVKAISSAVR KAGIAHLYGI AGSTNVTGDQ VKKLDVLSND LVMNMLKSSF ATCVLVSEED KHAIIVEPEK RGKYVVCFDP LDGSSNIDCL VSVGTIFGIY RKKSTDEPSE KDALQPGRNL VAAGYALYGS ATMLVLAMDC GVNCFMLDPA IGEFILVDKD VKIKKKGKIY SLNEGYARDF DPAVTEYIQR KKFPPDNSAP YGARYVGSMV ADVHRTLVYG GIFLYPANKK SPNGKLRLLY ECNPMAYVME KAGGMATTGK EAVLDVIPTD IHQRAPVILG SPDDVLEFLK VYEKHSAQ
**Specific Activity:** Specific activity is > 7,000 pmol/min/ug obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NADP. One unit will oxidize 1.0 pmole of fructose 1,6 diphosphate to fructose 6-phosphate and inorganic phosphate per minute at pH 9.5 at 37C.
**Molecular weight:** 39.0 kDa (358aa), confirmed by MALDI-TOF

**Storage:** Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

**General Readings:** Rabenhorst U., et al. (2009) Hepatology. 50(4):1121-9. Hirota K., et al. (2008) Nature. 456(7218):130-4.

Pictures:




15% SDS-PAGE (3ug)