

32-2192: BPGM Recombinant Protein

Alternative Name : Bisphosphoglycerate mutase, EC 5.4.2.4, BPGM, 2,3-bisphosphoglycerate mutase erythrocyte, 2,3-bisphosphoglycerate synthase, BPG-dependent PGAM.

Description

Source : Escherichia Coli. BPGM Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 267 amino acids (1-259 a.a.) and having a molecular mass of 31 kDa. The BPGM is fused to an 8 amino acid His Tag at C-Terminus and purified by proprietary chromatographic techniques. BPGM is found at high concentrations in red blood cells where it binds to and decreases the oxygen affinity of hemoglobin. PGM deficiency increases the oxygen affinity of cells. BPGM is a multifunctional enzyme that catalyzes 2,3-DPG synthesis through its synthetase activity, and 2,3-DPG degradation using its phosphatase activity. BPGM has phosphoglycerate phosphomutase activity. Mutations in BPGM cause hemolytic anemia. BPGM catalyzes the reaction of EC 5.4.2.1 (mutase) and EC 3.1.3.13 (phosphatase), but with a reduced activity.

Product Info

Amount : 20 µg
Purification : Greater than 95% as determined by SDS-PAGE.
Content : The BPGM solution contains 20mM Tris-HCl pH-8, 1mM DTT, and 10% glycerol.
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 : MSKYKLIMLR HGEGAWNKEN RFCSWVDQKL NSEGMEERN CGKQLKALNF EFDLVFTSVL NRSIHTAWLI
 LEELGQEWVP VESSWRLNERHYGALIGLNR EQMALNHGEE QVRLWRRSYN VTPPPIEESH PYYQEIYNDR
 RYKVC DVPLD QLPRSESLKD VLERLLPYWN ERIAPEVLRG KTILISAHGN SSRALLKHLE GISDEDIINI
 TLPTGVPIII ELDENLRAVG PHQFLGDQEA IQAAIKKVED QGKVKQAKKL EHHHHHHH.

