

## 32-6884: PGP Human, Active

**Application :** Functional Assay

**Alternative Name :** Glycerol-3-phosphate phosphatase, G3PP, Aspartate-based ubiquitous Mg(2+)-dependent phosphatase, AUM, Phosphoglycolate phosphatase, PGP.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Phosphoglycolate phosphatase (PGP) is discovered in all tissues including red cells, lymphocytes and cultured fibroblasts (at protein level). PGP is most active in skeletal muscle and cardiac muscle. The catalytic activity of PGP is 2-phosphoglycolate + H<sub>2</sub>O = glycolate + phosphate. Diseases associated with PGP include tardive dyskinesia and polycystic kidney disease.

PGP Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 345 amino acids (1-321a.a) and having a molecular mass of 36.5kDa. PGP is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95% as determined by SDS-PAGE.

**Content :** PGP protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 10% glycerol and 1mM DTT..

**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 MGSMAAAEA GGDDARCVRL SAERAQALLA DVDTLLFDCD  
GVLWRGETAV PGAPEALRAL RARGKRLGFI TNNSSKTRAA YAEKLRRLLGF GGPAGPGASL EVFGTAYCTA  
LYLRQRLAGA PAPKAYVLGS PALAAELEAV GVASVGVGPE PLQGEGPGDW LHAPLEPDVR AVVVGFDPHF  
SYMKLTKALR YLQQPGCLLV GTNMDNRLPL ENGRFIAGTG CLVRAVEMAA QRQADIIGKP SRFIFDCVSQ  
EYGINPERTV MVGDRLDTDI LLGATCGLKT ILTLTGVS TL GDVKNNQESD CVSKKKMVPD FYVDSIADLL  
PALQG.

### Application Note

Specific activity is > 3,000 units/mg, and is defined as the amount of enzyme that hydrolyze 1.0 nmole of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37C.