

Glucose-6-Phosphate Dehydrogenase Human Recombinant

Item Number	rAP-1025
Synonyms	G6PD, G6PD1, Glucose-6-phosphate 1-dehydrogenase.
Description	G6PD Human Recombinant produced in Hi-5 cells is a single polypeptide chain containing 535 amino acids (1-515) and having a molecular mass of 61.4kDa. G6PD is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.
Uniprot Accession Number	P11413
Amino Acid Sequence	MGSSHHHHH SSGLVPRGSH MAEQVALSRT QVCGILREEL FQGDAFHQSD THIFIIMGAS GDLAKKKI-YP TIWWLFRDGL LPENTFIVGY ARSRLTVADI RKQSEPFKA TPEEKLKLED FFARNSYVAG QYDDAASYQR LNSHMNALHL GSQANRLFYL ALPPTVYEAV TKNIHESCMS QIGWNRIVE KPFGRDLQSS DRLSNHISSL FREDQIYRID HYLKEMVQN LMVLRFANRI FGPIWNRDNI ACVILTFKEP FGTEGRGGYF DEFGIIRDVM QNHLLQMLCL VAMEKPASTN SDDVRDEKVK VLKCISEVQA NNVVLGQYVG NPDGEGEATK GYLDDPTVPR GSTTATFAAV VLYVENERWD GVPFILRCGK AL-NERKAEVR LQFHDVAGDI FHQQCKRNL VIRVQPNEAV YTKMMTKKPG MFFNPEESEL DLTYG-NRYKN VKLPDAYERL ILDVFCGSQM HFVRSDELRE AWRIFTPLLH QIELEKPKPI PYIYGSRGPT
Source	Hi-5 cells.
Physical Appearance and Stability	Sterile Filtered colorless solution. 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.
Formulation and Purity	The G6PD solution (0.5mg/1ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1mM PMSF, 2mM EDTA, 2mM DTT, 200mM NaCl and 20% glycerol. Greater than 95% as determined by SDS-PAGE.
Application	
Solubility	
Biological Activity	Specific activity is > 7 units/ml obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NAD or NADP. One unit oxidizes 1.0 umole D-glucose-6-phosphate to 6-phospho-D-gluconate per min in the presence of bet
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**