**Hexokinase plus Glucose-6-Phosphate Dehydrogenase (Lot 180401)**

E-HKGDH  
(EC 2.7.1.1) ATP:D-hexose 6-phosphotransferase  
(EC 1.1.1.49) D-glucose-6-phosphate:NADP+ 1-oxidoreductase

**PROPERTIES**

1. **ELECTROPHORETIC PURITY:**  
   Each protein appears as a single band on SDS-gel electrophoresis and on isoelectric focusing (see sheets for individual enzymes for details).

2. **SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:**  
   Hexokinase (HK); 100 U/mg of protein at pH 7.5 and 25°C before mixing with G6P-DH.  
   **One Unit** of hexokinase is the amount of enzyme required to produce one µmole of NADPH from NADP⁺ per minute.

   Glucose-6-Phosphate Dehydrogenase (G6P-DH); 641 U/mg of protein at pH 7.8 and 25°C before mixing with hexokinase (HK).  
   **One Unit** of Glucose-6-phosphate Dehydrogenase activity is the amount of enzyme required to convert one µmole of glucose-6-phosphate to 6-phosphogluconate per minute.

3. **CONTAMINATING ACTIVITIES (as a percentage of major activities):**  
   Refer to the individual data sheets for hexokinase and glucose-6-phosphate dehydrogenase.

4. **PHYSICOCHEMICAL PROPERTIES:**  
   Recommended conditions of use are at pH 7.4 and up to 40°C.

5. **STORAGE AND USE CONDITIONS/RECOMMENDATIONS:**  
   This mixture of enzymes is supplied as an ammonium sulphate suspension and should be stored at 4°C. For use in the measurement of D-fructose or D-glucose, refer to the **D-Fructose/D-Glucose Assay Kit booklet (Megazyme cat. no. K-FRUGL)** for details of required concentrations, aliquots and incubation times. Swirl the vial to ensure that the enzymes are uniformly suspended before removing aliquots.