

## 32-6980: GLK E.Coli, Active

**Application :** Functional Assay  
**Alternative Name :** Glucokinase, ECK2384, JW2385.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Glucokinase or GLK, is a protein, part of the bacterial glucokinase superfamily. In the bacteria E. coli, glucose can be transported to the inner cell through a system called PTS as glucose 6-phosphate, therefore, GLK is less crucial to the bacteria.

GLK E.Coli Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 344 amino acids (1-321) and having a molecular mass of 37.1kDa. GLK is fused to a 23 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** GLK protein solution (1mg/ml) contains 0.15M NaCl, 20mM Tris-HCl buffer (pH 8.0) 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 :** MGSSHHHHH SSGLVPRGSH MGSMTKYALV GDVGGTNARL ALCDIASGEI SQAKTYSGLD YPSLEAVIRV YLEEHKVEVK DGCIAIACPI TGDWVAMTNH TWAFSIAEMK KNLGFSHLEI INDFTAVSMA IPMLKKEHLI QFGGAEPVEG KPIAVYGAGT GLGVAHLVHV DKRWVSLPGE GGHVDFAPNS EEEAIILEIL RAEIGHVSAE RVLSGPGLVN LYRAIVKADN RLPENLKPKD ITERALADSC TDCRRALSLF CVIMGRFGGN LALNLGTFGG VFIAGGIVPR FLEFFKASGF RAAFEDKGRF KEYVHDIPVY LIVHDNPGLL GSGAHLRQTL GHIL

### Application Note

Specific activity is > 70unit/mg obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NADP. One unit will oxidize 1.0 umole of Glucose to D-glucose 6-phosphate per minute in the presence of Beta-NADP at pH 9.0 at 37C. ÅÅ