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32-6983: IDNK E.Coli, Active

Application :	Functional Assay
Alternative Name :	Thermosensitive gluconokinase, Gluconate kinase 1, idnK, D-gluconate kinase thermosensitive, D-gluconate kinase, thermosensitive, ECK4261, gntV, JW4225, b4268

Description

Source: Escherichia Coli.
Sterile Filtered colorless solution.
D-gluconate kinase or idnk is a thermosensitive protein, consists of 187 a.a and part of the gluconokinase gntK/gntV protein family. Idnk enhances the conversion of ATP + D-gluconate => ADP + 6-phospho-D-gluconate. Idnk has a crucial part in determination of gender, removal of a certain portion of 9p may result in the making of male to female (reversal of sex), that leads to a female that has the genotype of male X, Y.
IDNK Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 210 amino acids (1-187) and having a molecular mass of 23.4 kDa.IDNK 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 90.0% as determined by SDS-PAGE.
Content :	The IDNK solution (1 mg/ml) contains 10% Glycerol, 1mM DTT, 0.15M NaCl and 20mM Tris-HCl buffer (pH 8.0).
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 MGSMAGESFI LMGVSGSGKT LIGSKVAALL SAKFIDGDDL HPAKNIDKMS QGIPLSDEDR LPWLERLNDA SYSLYKKNET GFIVCSSLKK QYRDILRKGS PHVHFLWLDG DYETILARMQ RRAGHFMPVA LLKSQFEALE RPQADEQDIV RIDINHDIAN VTEQCRQAVL AIRQNRICAK EGSASDQRCE

Application Note

Specific activity is > ÃÂ 80unit/mg. One unit will convert 1.0 umole of D-gluconate to 6-phospho-Dgluconate per minute at pH 8.0 at 37ÃÂ°C.