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Certificate of Analysis and Data Sheet

Recombinant Human Riboflavin Kinase

Catalog No.
228-10478

Source:
Escherichia Coli.

Synonyms
Riboflavin kinase, ATP:riboflavin 5'-phosphotransferase, Flavokinase, RFK, RIFK, FLJ11149, RP11-422N19.2.

Introduction
Flavokinase is a transferases family member, specifically those transferring phosphorus-containing groups (phosphotransferases) with an alcohol group as acceptor. Flavokinase is an enzyme that catalyzes the phosphorylation of riboflavin (vitamin B2) to form flavin-mononucleotide (FMN), which is an obligatory step in vitamin B2 utilization and flavin cofactor synthesis. It has been proposed that TNF, through the activation of the RFK gene, enhances the incorporation of FAD in NADPH oxidase enzymes, which is a critical step for the assembly and activation of NADPH oxidase.

Description
Flavokinase Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 182 amino acids (1-162 a.a.) and having a molecular mass of 20.5kDa. Flavokinase is fused to 20 a.a. His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance
Sterile filtered colorless solution.

Formulation
The Flavokinase solution containing 20mM Tris-HCl buffer (pH8.0) and 10% glycerol.

Stability
Flavokinase although stable at 4°C for 1 week, should be stored below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze thaw cycles.

Amino acid sequence
MGSSHHHHHH SSGLVPRGSH MPRADCIMRH LPYFCRGQVV RGFGRGSKQL GIPTANFPEQ
VVDNLPADIS TGIYYGWASV GSGDVHKMVV SIGWNPYYKN TKKSMETHIM HTFKEDFYGE
ILNVAIVGYL RPEKNFDSLE SLISAIQGDI EEAKKRLELP EHLKIKEDNF FQVSKSKIMNGH.

Purity
Greater than 90.0% as determined by SDS-PAGE.