

Ethanolamine Kinase 2, Active, Human Recombinant

CATALOG NO:	P1158-10	10 µg
ALTERNATE NAMES:	Ethanolamine Kinase 2, ETNK2, EK12, ethanolamine phosphokinase, Ethanolamine kinase-like protein	
SOURCE:	<i>E. coli</i>	
PURITY:	≥90% by SDS-PAGE	
MOL. WEIGHT:	This protein is fused with a polyhistidine tag at the N-terminus and has an apparent MW of ~45 kDa (1-386aa)	
FORM:	Liquid	
FORMULATION:	20 mM Tris, pH 8.0, 150 mM NaCl, 2 mM DTT, 2 mM EDTA and 20% glycerol	
STORAGE CONDITIONS:	Store at -20°C. Stable for at least 6 months as supplied. Avoid repeated freeze-thaw cycles.	
DESCRIPTION:	Ethanolamine kinase, ETNK, (E.C. 2.7.1.82), catalyzes the ATP-dependent phosphorylation of free intracellular ethanolamine and this is the first committed step of the de novo CDP-ethanolamine pathway for phosphatidylethanolamine (PE) biosynthesis in mammalian tissues. PE is a major phospholipid component of cell membranes and it is involved in diacylglycerol and G protein-dependent signal transduction. ETNK plays a critical role in cell growth and it is implicated to associate with abnormal choline and ethanolamine phospholipid metabolism identified in breast, prostate, ovarian and cervical cancers. Two isoforms of ethanolamine kinase, ETNK1 and ETNK2, have been identified in mammalian cells and they share > 50% in homology. BioVision's active human ETNK2 is suitable for functional assays, high-throughput screening and preclinical studies in drug discovery.	
SPECIFIC ACTIVITY:	≥2 mU/mg. One unit of ETNK2 catalyzes the conversion of 1 µmole of ATP to ADP per minute at pH 7 at 25°C	

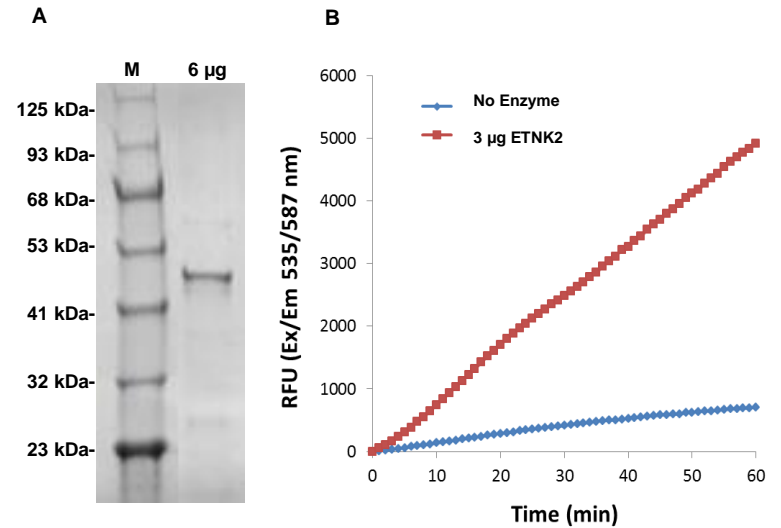


Fig A. SDS-PAGE (4-20%) of Recombinant ETNK2: Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. The protein shows a predicted MW of ~ 45 kDa

Fig B. Activity plot of ETNK2 converting ATP to ADP: Specific activity of ETNK2 is ≥ 2 mU/mg. ETNK2 reacts with 1 mM of ATP at pH 7 and 25°C. Rate of ADP production was detected by increase in fluorescence.

RELATED PRODUCT:

- ADP Colorimetric/Fluorometric Assay Kit (**Cat. No. K355-100**)
- Adenylate Kinase (AK) Activity Colorimetric/Fluorometric Assay Kit (**Cat. No. K350-100**)
- Pyruvate Kinase Activity Colorimetric/Fluorometric Assay Kit (**Cat. No. K709-100**)
- Creatine Kinase (CK) Activity Colorimetric Assay Kit (**Cat. No. K777-100**)

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