

ETNK2 Antibody / Ethanolamine kinase 2 Antibody (FY13658)

Catalog No.	Formulation	Size
FY13658	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	Q9NVF9
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml ELISA : 0.1-0.5 ug/ml
Limitations	Intended solely for research purposes, this ETNK2 Antibody / Ethanolamine kinase 2 Antibody is not for clinical use.

ETNK2 Antibody by IF in U2OS cells. Immunofluorescence analysis of U2OS cells using ETNK2 Antibody shows green staining distributed predominantly throughout the cytoplasmic region, while DAPI labels nuclei blue. Cells were subjected to enzymatic antigen retrieval for 15 minutes, blocked with 10% goat serum and incubated overnight at 4°C with 5 ug/ml primary antibody. Fluoro488-conjugated goat anti-rabbit IgG was applied at 1:500 for 30 minutes at 37°C. The staining pattern is described without assigning the signal to a specific organelle.

ETNK2 Antibody by WB in rat and mouse liver. Western blot analysis using ETNK2 Antibody demonstrates a prominent immunoreactive band at approximately 40-42 kDa in rat liver (lane 1) and mouse liver (lane 2). The major bands are close to the expected molecular weight of ethanolamine kinase 2. The mouse sample shows a stronger band in this experiment, along with a weaker higher-molecular-weight signal near 65 kDa whose identity is not established. Molecular weight standards are shown at left. The blot documents detection in two rodent tissue lysates without implying quantitative differences in ETNK2 abundance.

Description

ETNK2 Antibody / Ethanolamine kinase 2 Antibody targets ethanolamine kinase 2, an enzyme that phosphorylates ethanolamine to produce phosphoethanolamine. This reaction is an early step in the CDP-ethanolamine branch of the Kennedy pathway, a major route for phosphatidylethanolamine synthesis. Phosphatidylethanolamine is an abundant membrane phospholipid that contributes to bilayer curvature, membrane protein function, and the structural properties of intracellular organelles. ETNK2 therefore participates in a metabolic pathway with consequences for membrane composition and cellular physiology.

The Kennedy pathway converts ethanolamine into phosphoethanolamine, then CDP-ethanolamine, before transferring the phosphoethanolamine group onto a diacylglycerol backbone. Ethanolamine kinases catalyze the ATP-dependent first step. ETNK2 and the related enzyme ETNK1 share this general biochemical function but differ in their regulation and tissue-associated expression patterns. Their existence illustrates how cells can maintain the same metabolic transformation through distinct enzyme isoforms. Flux through the pathway depends not only on kinase activity but also on substrate availability and the subsequent cytidylyltransferase and phosphotransferase reactions.

Phosphatidylethanolamine supports membrane remodeling and can influence processes such as mitochondrial membrane organization and autophagy-associated lipid conjugation. However, a change in ETNK2 abundance should not automatically be equated with a proportional change in total phosphatidylethanolamine, because cells also obtain this lipid through alternative metabolic routes and remodeling reactions. The relative contributions of these pathways depend on cellular conditions. NSJ Bioreagents offers this ETNK2 Antibody to support research into ethanolamine phosphorylation and the regulation of phospholipid biosynthesis. Studying ETNK2 alongside other Kennedy pathway enzymes can help distinguish changes at the initial phosphorylation step from broader adjustments in membrane lipid metabolism.

Explore related research targets in our [Metabolism Antibody / Metabolism Antibodies](#) collection.

Application Notes

The appropriate working dilution of the ETNK2 Antibody / Ethanolamine kinase 2 Antibody should be optimized by the end user.

Immunogen

The ETNK2 Antibody was generated using e. coli-derived human ETNK2 recombinant protein (amino acids M1-K335).

Storage

Following reconstitution, the ETNK2 Antibody can be kept at 4oC for one month. Aliquot for extended storage at -20oC for up to six months, avoiding repeated freezing and thawing.

Alternate Names

ETNK2 antibody, Ethanolamine kinase 2 antibody, EKI2 antibody, HMFT1716 antibody, EKI 2 antibody, Ethanolamine kinase-like protein antibody

