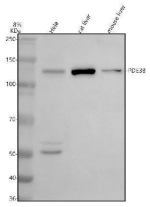
PDE3B Antibody / Phosphodiesterase 3B Antibody (FY13520)

Catalog No.	Formulation	Size
FY13520	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 Na2HPO4.
UniProt	Q13370
Applications	Western blot: 0.5-1ug/ml
Limitations	Intended solely for research purposes, this PDE3B Antibody / Phosphodiesterase 3B Antibody is not for clinical use.



PDE3B Antibody by WB in human and rodent samples. Western blot analysis using Phosphodiesterase 3B Antibody detects a prominent band near 125-130 kDa in human HeLa cell lysate (lane 1), rat liver lysate (lane 2), and mouse liver lysate (lane 3). The rat liver lane shows the strongest signal, while HeLa and mouse liver display weaker bands at comparable migration positions. Thirty ug of reduced lysate was loaded per lane on an 8% SDS-PAGE gel. The primary antibody was applied at 0.5 ug/mL overnight at 4oC, followed by an HRP-conjugated anti-rabbit secondary antibody and chemiluminescent detection. A lower band is also visible in the HeLa lane without established identity.

Description

PDE3B Antibody / Phosphodiesterase 3B Antibody detects PDE3B, an enzyme that hydrolyzes cyclic nucleotides and thereby limits the duration and intensity of intracellular second-messenger signaling. Members of the PDE3 family can act on both cyclic AMP and cyclic GMP, although their kinetic properties and regulation differ from those of other phosphodiesterase families. PDE3B is especially important in metabolic tissues, where cyclic AMP concentrations help control responses to hormones and nutrient availability. By degrading cyclic AMP, PDE3B can modify protein kinase A-dependent signaling and downstream metabolic events.

Insulin signaling can regulate PDE3B through phosphorylation-dependent mechanisms, helping coordinate the transition between energy mobilization and storage. In adipocytes, PDE3B contributes to the suppression of lipolysis by reducing

cyclic AMP signaling that would otherwise activate lipolytic enzymes. The protein also participates in signaling networks relevant to pancreatic beta cells and other metabolically active tissues. Its activity is influenced by subcellular localization, protein associations, and the balance of hormonal inputs. The Phosphodiesterase 3B Antibody designation reflects the full protein name associated with the PDE3B target.

Because cyclic AMP is involved in many signaling pathways, altered PDE3B function can affect metabolic responses in ways that depend strongly on cell type. Research on PDE3B has examined its relationship to insulin action, lipid turnover, and the integration of endocrine signals. It is important to distinguish PDE3B from PDE3A, a related enzyme with overlapping catalytic properties but different physiological emphasis and expression patterns. NSJ Bioreagents provides the PDE3B Antibody for this cyclic nucleotide-regulating protein. A PDE3B Antibody is relevant to the molecular mechanisms connecting hormone signaling, cyclic AMP turnover, and lipid metabolism.

Explore related research targets in our Metabolism Antibody / Metabolism Antibodies collection.

Application Notes

Working dilutions of the PDE3B Antibody / Phosphodiesterase 3B Antibody may require optimization according to the experimental protocol.

Immunogen

The PDE3B Antibody was generated using a synthetic peptide corresponding to a sequence at the C-terminus of human PDE3B.

Storage

Following reconstitution, the PDE3B 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

PDE3B antibody, cGMP-inhibited 3',5'-cyclic phosphodiesterase 3B antibody, cGMP-inhibited 3' antibody, 5'-cyclic phosphodiesterase 3B antibody, phosphodiesterase 3B antibody, 5'-cyclic phosphodiesterase B antibody, CGIPDE1 antibody, CGIP1 antibody, Cyclic GMP-inhibited phosphodiesterase B antibody, CGI-PDE B antibody

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