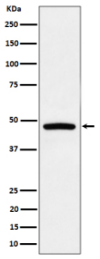
PREB Antibody / Prolactin regulatory element binding protein [clone 29P71] (FY12225)

Catalog No.	Formulation	Size
FY12225	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29P71
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9HCU5
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200
Limitations	This PREB antibody is available for research use only.



Western blot analysis of PREB expression in Raji cell lysate using PREB antibody.

Description

PREB antibody detects prolactin regulatory element binding protein, a transcription factor involved in gene regulation and vesicular trafficking. PREB contains WD-repeat domains that facilitate protein-protein interactions, allowing it to function as a transcriptional regulator and vesicle-associated factor. It is expressed in a variety of tissues, with high levels in brain, pituitary, and pancreas, underscoring its multifunctional roles in development and physiology.

Research using PREB antibody has revealed two primary functions of the protein. First, PREB binds to promoter elements of the prolactin gene, regulating hormone expression in the anterior pituitary. By influencing prolactin secretion, PREB impacts reproductive biology, lactation, and endocrine homeostasis. Second, PREB is associated with vesicular transport machinery, where it facilitates protein trafficking between the endoplasmic reticulum and Golgi apparatus. This dual role positions PREB as a regulator of both transcription and intracellular trafficking.

In developmental biology, PREB has been shown to be essential for embryogenesis and organogenesis. Knockout models reveal that PREB deficiency leads to embryonic lethality, indicating its necessity for proper gene regulation and cellular organization. Heterozygous models display neurological and metabolic abnormalities, linking PREB to central nervous system development and energy balance.

PREB has also been studied in the context of neurological and metabolic disorders. Altered PREB expression affects neuroendocrine regulation and insulin secretion. Dysregulation of vesicular trafficking involving PREB has implications for protein misfolding diseases and diabetes. In cancer research, PREB expression changes have been linked to tumor progression, although its exact role remains under investigation.

Antibodies against PREB are validated for western blot, immunohistochemistry, and immunofluorescence. These reagents allow researchers to study nuclear localization, promoter occupancy, and trafficking-related functions. Clone-based antibodies ensure specificity and reproducibility across experimental systems.

NSJ Bioreagents supplies this PREB antibody for research into transcriptional regulation, neuroendocrine biology, and vesicular trafficking.

Application Notes

Optimal dilution of the PREB antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PREB was used as the immunogen for the PREB antibody.

Storage

Store the PREB antibody at -20oC.

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