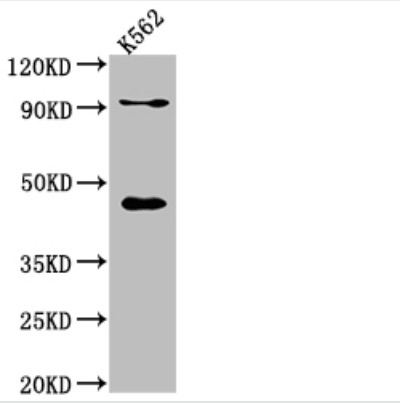
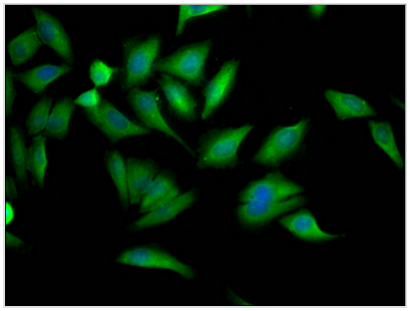
PCYT1A Antibody

Product Code	CSB-RA213218A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P49585
Immunogen	A synthesized peptide derived from human PCYT1A
Species Reactivity	Human
Tested Applications	ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200
Relevance	Controls phosphatidylcholine synthesis.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Cancer; Metabolism; Signal transduction
Gene Names	PCYT1A
Accession NO.	4F2

Image



Western Blot
Positive WB detected in: K562 whole cell lysate
All lanes: PCYT1A antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 42 kDa
Observed band size: 42 kDa



Immunofluorescence staining of Hela Cells with CSB-RA213218A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

In yeast, fly, and mammalian cells, PCYT1A, the rate-limiting enzyme of phosphatidylcholine (PC) synthesis, is intranuclear and re-locates to the nuclear membrane in response to the demand for membrane PL production. Membrane lipid stored curvature elastic (SCE) stress is increased by PC deficiency. PCYT1A deletions caused functional impairment in cells that generate PC for secretion as well as membrane maintenance. Lipodystrophy, spondylometaphyseal dysplasia with cone-rod dystrophy (SMD-CRD), and isolated retinal dystrophy are all caused by mutations in the PCYT1A gene.

The preparation of the recombinant PCYT1A antibody involves the mammalian cell lines expression of plasma vectors containing PCYT1A antibody genes. B cells isolated from immunized animals' blood were treated to obtain RNA, which underwent reverse transcription to yield DNA genes. Antibody genes were sequenced and screened from the DNA. After transient expression, cell supernatant was collected and then purified using Affinity-chromatography to obtain the recombinant PCYT1A antibody. This recombinant PCYT1A antibody is recommended to use in the PCYT1A for the detection of PCYT1A protein from Human.