



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C
#6931

CCT α (D18B6) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 42	Source/Isotype: Rabbit IgG	UniProt ID: #P49585	Entrez-Gene Id: 5130
-------------------------------	--------------------------------	-----------------------------------	------------------------	--------------------------------------	-------------------------------	--------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

Specificity/Sensitivity

CCT α (D18B6) Rabbit mAb recognizes endogenous levels of total CCT α protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human CCT α protein.

Background

CTP:phosphocholine cytidyltransferase (CCT) is a critical enzyme that regulates the CDP-choline pathway for the biosynthesis of phosphatidylcholine. Three distinct CCT isoforms are found in mammals, including CCT α , CCT β 2, and CCT β 3 (1,2). CCT α is the major isoform that is expressed in most tissues (3). CCT α is essential in the synthesis and secretion of surfactant by alveolar epithelial cells and is important in maintaining the phosphatidylcholine level that regulates lipoprotein assembly and secretion in hepatocytes (4,5). CCT α is a major component in membrane biogenesis during cytokine secretion by stimulated macrophages (6). Monoubiquitination of CCT α prevents it from entering the nucleus and leads to its degradation by lysosome (7).

Background References

1. Jackowski, S. and Fagone, P. (2005) *J Biol Chem* 280, 853-6.
2. Clement, J.M. and Kent, C. (1999) *Biochem Biophys Res Commun* 257, 643-50.
3. Karim, M. et al. (2003) *Biochim Biophys Acta* 1633, 1-12.
4. Tian, Y. et al. (2007) *Mol Cell Biol* 27, 975-82.
5. Jacobs, R.L. et al. (2004) *J Biol Chem* 279, 47402-10.
6. Tian, Y. et al. (2008) *J Cell Biol* 181, 945-57.
7. Chen, B.B. and Mallampalli, R.K. (2009) *Mol Cell Biol* 29, 3062-75.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for

Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.