



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
#3561

CCT2 Antibody

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

Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 54	Source/Isotype: Rabbit	UniProt ID: #P78371	Entrez-Gene Id: 10576
-------------------------------	--------------------------------	-----------------------------------	------------------------	----------------------------------	-------------------------------	---------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

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

Specificity/Sensitivity

CCT2 Antibody detects endogenous levels of total CCT2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human CCT2. Antibodies are purified by protein A and peptide affinity chromatography.

Background

CCT2 is one of eight largely unrelated subunit proteins found in a protein chaperone complex known as the chaperonin-containing TCP-1 (CCT) or TRiC complex. The CCT complex is an abundant cytosolic component that is credited with helping newly synthesized polypeptides adopt the correct conformation (1). Proteins that fold and assemble with the help of CCT include the cytoskeletal proteins actin and tubulin as well as up to 15% of newly synthesized eukaryotic proteins (2). CCT2 is the β-subunit of the chaperone complex and is one of several CCT proteins that exhibit increased expression in response to stress. This implies that the CCT complex helps cells recover from protein damage by assisting in protein folding and assembly (3). CCT subunit levels also change throughout the cell cycle, with lower protein levels (and reduced chaperone activity) found during induced cell cycle arrest during at M phase (4). Each CCT subunit is thought to perform a specific function during protein folding and assembly (5); CCT2 exhibits both actin and tubulin binding activities (6,3) but the exact molecular function on this subunit remains uncertain.

Background References

1. Kubota, H. et al. (1995) *Eur J Biochem* 230, 3-16.
2. Valpuesta, J.M. et al. (2002) *FEBS Lett* 529, 11-6.
3. Yokota, S.I. et al. (2000) *Eur J Biochem* 267, 1658-64.
4. Yokota, S. et al. (2001) *Eur J Biochem* 268, 4664-73.
5. Kubota, H. et al. (1994) *Curr Biol* 4, 89-99.
6. McCormack, E.A. et al. (2001) *J Struct Biol* 135, 198-204.

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.