

Store at -20C  
#5645

## Phospho-TACC3 (Ser558) Antibody



**Cell Signaling**  
TECHNOLOGY®

**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

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	140	Rabbit	#Q9Y6A5	10460

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	Phospho-TACC3 (Ser558) Antibody detects endogenous levels of TACC3 protein only when phosphorylated at Ser558.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser558 of human TACC3 protein. Antibodies are purified by Protein A and peptide affinity chromatography.	
<b>Background</b>	Transforming acid coiled-coil (TACC) proteins are a family of proteins characterized by a common coiled-coil motif of approximately 200 amino acids at the carboxy-terminal end (1). Three family members have been identified in humans: TACC1, TACC2, and TACC3. These proteins are thought to be involved in centrosomal microtubule assembly and have been mapped to chromosomal regions that are disrupted in some cancers (reviewed in 2). TACC3 has been shown to be upregulated in many cancer cell lines (3). When phosphorylated at Ser558 by Aurora A, mammalian TACC3 is localized to mitotic spindles and increases microtubule stability (4,5). For this reason, it has been suggested that monitoring the localization of phosphorylated TACC3 would be an effective way to determine the efficacy of Aurora A inhibitors that show promise as anti-cancer drugs (6,7). In addition, studies have shown that TACC3 could be useful as a prognostic marker for non-small cell lung cancer (8).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Gergely, F. et al. (2000) <i>Proc Natl Acad Sci USA</i> 97, 14352-7.</li> <li>Peset, I. and Vernos, I. (2008) <i>Trends Cell Biol</i> 18, 379-88.</li> <li>Still, I.H. et al. (1999) <i>Genomics</i> 58, 165-70.</li> <li>Kinoshita, K. et al. (2005) <i>J Cell Biol</i> 170, 1047-55.</li> <li>Schneider, L. et al. (2007) <i>J Biol Chem</i> 282, 29273-83.</li> <li>LeRoy, P.J. et al. (2007) <i>Cancer Res</i> 67, 5362-70.</li> <li>Tyler, R.K. et al. (2007) <i>Cell Cycle</i> 6, 2846-54.</li> <li>Jung, C.K. et al. (2006) <i>Pathol Int</i> 56, 503-9.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
<b>Trademarks and Patents</b>	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit <a href="http://cellsignal.com/trademarks">cellsignal.com/trademarks</a> for more information.
<b>Limited Uses</b>	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.