Revision 1

#8664 Store at -20C

Phospho-SGTA (Ser305) (D23E10) Rabbit mAb

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/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H Mk	Endogenous	34	Rabbit IgG	#O43765	6449

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:100

Storage

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

Specificity / Sensitivity

Phospho-SGTA (Ser305) (D23E10) Rabbit mAb recognizes endogenous levels of SGTA protein only when phosphorylated at Ser305.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser305 of human SGTA protein.

Background

SGTA, small glutamine-rich tetratricopeptide repeat-containing protein A, is an ubiquitously expressed co-chaperone that binds directly to HSC70 and HSP70 and regulates their ATPase activity (1,2). SGTA is a 34 kDa protein that is rich in glutamine residues at its C terminus and contains three tandemly repeated TPR motifs (3). The TPR domain of SGTA shows sequence similarity to the TPR domains of Hop, CHIP, and TOM70 (4). The TPR domain of SGTA also interacts with HSP90 and was recently found to be a pro-apoptotic factor (5,6).
Phosphorylation of SGTA at Ser305 was identified at Cell Signaling Technology (CST) using PhosphoScan®, a CST™ LC-MS/MS platform for phosphorylation site discovery (7). Site-specific mutation analysis indicated that phosphorylation at Ser305 is essential for PDGFR α stabilization and PDGFR α-dependent cancer cell survival (7).

Background References

1. Liu, F.H. et al. (1999) *J Biol Chem* 274, 34425-32.
2. Tobaben, S. et al. (2003) *J Biol Chem* 278, 38376-83.
3. Cziepluch, C. et al. (1998) *J Virol* 72, 4149-56.
4. Scheufler, C. et al. (2000) *Cell* 101, 199-210.
5. Liou, S.T. and Wang, C. (2005) *Arch Biochem Biophys* 435, 253-63.
6. Yin, H. et al. (2006) *Biochem Biophys Res Commun* 343, 1153-8.
7. Moritz, A. et al. (2010) *Sci Signal* 3, ra64.

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

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Limited Uses

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.