Revision 1

Store at -20C

#8664

# 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: |
|---|---|---|---|---|---|---|
| W, 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

**W:** Western Blotting **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** Human **Mk:** Monkey

## Trademarks and Patents



## Limited Uses

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