## #5189 Store at -200

## Phospho-CARD11 (Ser652) Antibody



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: WB	Reactivity: H M R	Sensitivity: Endogenous	<b>MW (kDa):</b> 130	Source: Rabbit	UniProt ID: #Q9BXL7	Entrez-Gene Id 84433	
Product Usage Information	Ap	Application			Dilution		
	We	Western Blotting			1:1000		
Storage		oplied in 10 mM sodi C. Do not aliquot the	\(\frac{1}{2}\)	), 150 mM NaCl, 10	00 μg/ml BSA and 50% g	ylycerol. Store at –	
Specificity / Sen		Phospho-CARD11 (Ser652) Antibody detects endogenous levels of CARD11 protein only when phosphorylated at Ser652.					
Species predicted to Monkey react based on 100%							

sequence homology:
Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to a region surrounding Ser652 of human CARD11 protein. Antibodies were purified by protein A and peptide affinity chromatography.

**Background** 

CARD11/Carma1/Bimp3 belongs to the MAGUK (membrane-associated guanylate kinase) family that typically function as molecular scaffolds in the assembly of multiprotein complexes (1,2). MAGUK family members contain an SH3 domain, a PDZ domain and a GuK domain homologous to guanylate kinase. In addition, CARD11 contains an amino-terminal CARD domain (caspase recruitment domain). This domain plays an important role in forming interactions with a number of proteins containing CARD domains that are involved in regulating apoptosis and NF-kB activation. CARD11 is predominately expressed in lymphocytes (1,2) and associates with the CARD domain of Bcl10. When overexpressed, CARD11 leads to the phosphorylation of Bcl10 and activation of NF-kB (1,2). CARD11 is constitutively associated with lipid rafts and is thought to function by recruiting Bcl10 and MALT1 and triggering the phosphorylation of IKKs (3,4). Several studies using the genetic disruption of CARD11 or dominant-negative mutations have demonstrated that it plays a critical role in NF-kB activation and lymphocyte signaling (4-7).

Phosphorylation at multiple sites within the central region of CARD11 regulates NF-kB activation (8-10).

## **Background References**

- 1. Bertin, J. et al. (2001) J. Biol. Chem. 276, 11877-11882.
- 2. Gaide, O. et al. (2001) FEBS Lett. 496, 121-127.
- 3. Stilo, R. et al. (2004) J. Biol. Chem. 279, 34323-34331.
- 4. Wang, D. et al. (2002) Nat. Immunol. 3, 830-835.
- 5. Jun, J.E. et al. (2003) Immunity 18, 751-762.
- 6. Hara, H. et al. (2003) Immunity 18, 763-775.
- 7. Gaide, O. et al. (2002) Nat. Immunol. 3, 836-843.
- 8. Sommer, K. et al. (2005) Immunity 23, 561-74.
- 9. Shinohara, H. et al. (2007) J Exp Med 204, 3285-93.
- 10. Moreno-García, M.E. et al. (2009) J Immunol 183, 7362-70.

**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

**Cross-Reactivity Key** 

**WB:** Western Blotting

Phospho-CARD11 (Ser652) Antibody (#5189) Datasheet Without Images Cell Signaling Technology

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** 

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.

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.