Revision 1

Store at -20C

#75468

CRP2 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/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M	Endogenous	20	Rabbit	#Q16527	1466

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 and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

CRP2 Antibody recognizes endogenous levels of total CRP2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly89 of human CRP2 protein. Antibodies are purified by peptide affinity chromatography.

Background

CRP2 is a LIM domain containing protein that is expressed from the *CSRP2* gene. It was first described to be a differentially regulated and preferentially expressed protein in aortic smooth muscle cells (1). It plays a role in development of the vasculature in embryogenesis (2). It was also established that CRP2 is expressed exclusively in stellate cells in the liver, being absent from hepatocytes, sinusoidal endothelial cells, and Kupffer cells. Upregulation of CRP2 was observed to occur upon early activation in the myofibroblastic program of stellate cells, and is now thought to be involved in the development of liver fibrosis (3).More recently, CRP2 has been shown to be an invadopodia actin bundling protein. Invadopodia are actin-rich membrane protrusions that direct extracellular matrix degradation that are believed to facilitate tumor cell invasion. CRP2 has been shown to be upregulated in breast tumors (4), and in B-cell acute lymphoblastic leukemia high CRP2 expression has been associated with poor outcome (5). The proximal promoter of the *CSRP2* gene has been shown to possess two hypoxia responsive elements that are targeted by HIF-1α. A model now is proposed whereby the *CSRP2* gene is a direct target of HIF-1 which facilitates hypoxia-induced breast cancer cell invasion through increased invadopodia formation (6).

Background References

1. Yet, S.F. et al. (1998) *J Biol Chem* 273, 10530-7.
2. Jain, M.K. et al. (1998) *Circ Res* 83, 980-5.
3. Weiskirchen, R. et al. (2001) *Biochem J* 359, 485-96.
4. Hoffmann, C. et al. (2016) *Oncotarget* 7, 13688-705.
5. Wang, S.J. et al. (2017) *Oncotarget* 8, 35984-36000.
6. Hoffmann, C. et al. (2018) *Sci Rep* 8, 10191.

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

Trademarks and Patents

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.