Revision 1

Store at -20C

#75468

CRP2 Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355) orders@cellsignal.com

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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

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Limited Uses

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