

**Citrate Synthase (D7V8B) Rabbit mAb**

**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, IF-IC, FC-FP	H M R Hm Mk	Endogenous	45	Rabbit IgG	#O75390	1431
<b>Product Usage Information</b>	<b>Application</b>					<b>Dilution</b>
	Western Blotting					1:1000
	Immunofluorescence (Immunocytochemistry)					1:50 - 1:100
	Flow Cytometry (Fixed/Permeabilized)					1:50
<b>Storage</b>	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.					
<b>Specificity/Sensitivity</b>	Citrate Synthase (D7V8B) Rabbit mAb recognizes endogenous levels of total citrate synthase protein.					
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human citrate synthase protein.					
<b>Background</b>	Citrate synthase (CS) is a mitochondrial enzyme that catalyzes the first and rate-limiting reaction of the citric acid cycle (1,2). The enzyme is responsible for the conversion of oxaloacetate and acetyl-CoA to citrate and CoA (1,2). Research studies show that CS knockdown HeLa cells are more malignant than vector-transfected cells from an <i>in vivo</i> xenograft model, which suggests a direct link between the Warburg Effect and tumor growth (2). Intervertebral disc degeneration, a growing health problem, has been linked to changes in citrate synthase activity (3).					
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Wiegand, G. and Remington, S.J. (1986) <i>Annu Rev Biophys Biophys Chem</i> 15, 97-117.</li> <li>2. Lin, C.C. et al. (2012) <i>Sci Rep</i> 2, 785.</li> <li>3. Gruber, H.E. et al. (2013) <i>J Orthop Res</i> 31, 1270-5.</li> </ol>					

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> 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.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IF-IC:</b> Immunofluorescence (Immunocytochemistry) <b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized)
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat <b>Hm:</b> Hamster <b>Mk:</b> Monkey
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