

Citrate Synthase (D7V8B) Rabbit mAb

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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
Product Usage Information	Application					Dilution
	Western Blotting					1:1000
	Immunofluorescence (Immunocytochemistry)					1:50 - 1:100
	Flow Cytometry (Fixed/Permeabilized)					1:50
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	Citrate Synthase (D7V8B) Rabbit mAb recognizes endogenous levels of total citrate synthase protein.					
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human citrate synthase protein.					
Background	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).					
Background References	1. Wiegand, G. and Remington, S.J. (1986) <i>Annu Rev Biophys Biophys Chem</i> 15, 97-117. 2. Lin, C.C. et al. (2012) <i>Sci Rep</i> 2, 785. 3. Gruber, H.E. et al. (2013) <i>J Orthop Res</i> 31, 1270-5.					

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 IF-IC: Immunofluorescence (Immunocytochemistry) FC-FP: Flow Cytometry (Fixed/Permeabilized)
Cross-Reactivity Key	H: Human M: Mouse R: Rat Hm: Hamster Mk: Monkey
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