

#2655

Store at -20C

CK1 Antibody

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TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: WB, W-S	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 34	Source: Rabbit	UniProt ID: #P48729	Entrez-Gene Id: 1452
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Product Usage Information	Application Western Blotting Simple Western™	Dilution 1:1000 1:10 - 1:50
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	This antibody detects endogenous levels of total casein kinase I-alpha 1 protein. This antibody may cross-react with casein kinase I-epsilon, casein kinase I-delta, and casein kinase I-gamma.	
Species predicted to react based on 100% sequence homology:	Chicken, Xenopus, Zebrafish, Bovine	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acid residues near the middle of human casein kinase I-alpha 1. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Casein Kinase I (CK1 or CKI) is the name given to a family of kinases consisting of multiple isoforms (α, α', β, γ1-3, δ, and ε) with a conserved N-terminal kinase domain and a variable C-terminal sequence that determines subcellular localization and regulates enzyme activity (1-3). Indeed, multiple inhibitory autophosphorylation sites have been identified near the C terminus of CK1ε (3). This ubiquitously expressed family of protein kinases has been implicated in multiple processes, including DNA repair, cell morphology, and Wnt signaling (4). Perhaps the best understood role of CK1 is to provide the priming phosphorylation of β-catenin at Ser45 to produce the consensus GSK-3 substrate motif (S/T-X-X-X-pS) (4).	
Background References	1. Gross, S.D. and Anderson, R.A. (1998) <i>Cell Signal</i> 10, 699-711. 2. Vancura, A. et al. (1994) <i>J Biol Chem</i> 269, 19271-8. 3. Gietzen, K.F. and Virshup, D.M. (1999) <i>J Biol Chem</i> 274, 32063-70. 4. Polakis, P. (2002) <i>Curr Biol</i> 12, R499-R501.	

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	WB: Western Blotting W-S: Simple Western™
Cross-Reactivity Key	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
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