

#3885 Store at -20C

ERCC1 Antibody

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Hm Mk	Endogenous	39	Rabbit	#P07992	2067

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	ERCC1 Antibody recognizes endogenous levels of total ERCC1 isoforms 1, 2 and 4 protein. Experiments utilizing overexpression constructs indicated that this antibody does not cross-react with ERCC1 isoform 3.	
Species predicted to react based on 100% sequence homology:	Dog	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human ERCC1. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	DNA repair systems operate in all living cells to manage a variety of DNA lesions. Nucleotide excision repair (NER) is implemented in cases where bulky helix-distorting lesions occur, such as those brought about by UV and certain chemicals (1). Excision Repair Cross Complementing 1 (ERCC1) forms a complex with ERCC4/XPF, which acts as the 5' endonuclease required to excise the lesion (2). ERCC1-XPF is also required for repair of DNA interstrand crosslinks (ICLs) (3) and involved in repair of double strand breaks (4). Research studies have shown that expression of ERCC1 is related to survival rate and response to chemotherapeutic drugs in several human cancers including non-small cell lung cancer (NSCLC) (5,6).	
Background References	<ol style="list-style-type: none"> 1. Shuck, S.C. et al. (2008) <i>Cell Res</i> 18, 64-72. 2. McDaniel, L.D. and Schultz, R.A. (2008) <i>Adv Exp Med Biol</i> 637, 65-82. 3. Niedernhofer, L.J. et al. (2004) <i>Mol Cell Biol</i> 24, 5776-87. 4. Ahmad, A. et al. (2008) <i>Mol Cell Biol</i> 28, 5082-92. 5. Zheng, Z. et al. (2007) <i>N Engl J Med</i> 356, 800-8. 6. Gossage, L. and Madhusudan, S. (2007) <i>Cancer Treat Rev</i> 33, 565-77. 	

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 IP: Immunoprecipitation
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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