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ERCC1 Antibody

#3885 Store at -20C

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 R Hm Mk	Endogenous	39	Rabbit	#P07992	2067

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
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

1. Shuck, S.C. et al. (2008) *Cell Res* 18, 64-72.
2. McDaniel, L.D. and Schultz, R.A. (2008) *Adv Exp Med Biol* 637, 65-82.
3. Niedernhofer, L.J. et al. (2004) *Mol Cell Biol* 24, 5776-87.
4. Ahmad, A. et al. (2008) *Mol Cell Biol* 28, 5082-92.
5. Zheng, Z. et al. (2007) *N Engl J Med* 356, 800-8.
6. Gossage, L. and Madhusudan, S. (2007) *Cancer Treat Rev* 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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey

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