

## PRODUCT DATA SHEET

**Product:** Anti-ERCC1 mAb, clone 8F1

**Cat. No.:** MC-991 (100 µg)

**Synonyms:**

Excision Repair Cross Complementing Protein-1 (ERCC1); Nucleotide Excision Repair Protein

**Description:**

The mammalian ERCC1-encoded polypeptide is required for nucleotide excision repair (NER) of damaged DNA and is homologous to *Saccharomyces cerevisiae* RAD10, which functions in repair and mitotic intrachromosomal recombination. The structure specific ERCC1/XPF endonuclease complex is implicated in the repair of two distinct types of lesions in DNA: NER for UV-induced lesions and bulky chemical adducts and recombination repair of the very genotoxic interstrand cross-links. NER mechanism involves dual incisions on both sides of the damage catalyzed by two nucleases. In mammalian cells XPG cleaves 3' of the DNA lesion while the ERCC1-XPF complex makes the 5' incision. Elevated levels of ERCC1 have also been reported in Cisplatin-resistant cells.

**Specificity:**

Recognizes a protein of 33-36 kDa, identified as the ERCC1.

**Positive Control:**

A431 or HeLa cells.

**Species Reactivity:**

Human and rat. Other species not tested.

**Isotype:**

Mouse IgG<sub>1</sub>

**Immunogen:**

Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with recombinant full length human ERCC1 protein and mouse myeloma Sp2/0 cells.

**Format:**

100 µg of purified monoclonal antibody at 1 mg/mL. Provided as a solution in PBS with 0.08% sodium azide.

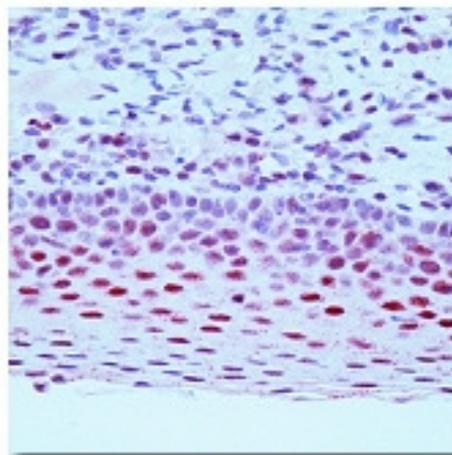
**Storage:**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

**Applications and Suggested Dilutions:**

- Immunohistochemistry: (frozen and formalin/paraffin sections) Use at 2-4 µg/mL.
- Immunoprecipitation: Use Ab at 2 µg/mg protein lysate.
- Western blot: Use at 1-5 µg/mL.

The optimal dilution for a specific application should be determined by the researcher.



Formalin-fixed, paraffin-embedded human tonsil stained with Anti-ERCC1 (Cat. No. MC-991).

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.