

## Product datasheet for **UM500011CF**

### ERCC1 Mouse Monoclonal Antibody [Clone ID: 2E12]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	2E12
Applications:	10k-ChIP, IF, IHC, WB
Recommended Dilution:	WB 1:500~1000, IHC 1:150, IF 1:100, FLOW 1:100
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ERCC1 (NP_973730) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	32.4 kDa
Gene Name:	Homo sapiens ERCC excision repair 1, endonuclease non-catalytic subunit (ERCC1), transcript variant 2, mRNA.
Database Link:	<a href="#">NP_001974</a> <a href="#">Entrez Gene 13870 Mouse</a> <a href="#">Entrez Gene 292673 Rat</a> <a href="#">Entrez Gene 574267 Monkey</a> <a href="#">Entrez Gene 2067 Human</a> <a href="#">P07992</a>



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**Background:**

The product of this gene functions in the nucleotide excision repair pathway, and is required for the repair of DNA lesions such as those induced by UV light or formed by electrophilic compounds including cisplatin. The encoded protein forms a heterodimer with the XPF endonuclease (also known as ERCC4), and the heterodimeric endonuclease catalyzes the 5' incision in the process of excising the DNA lesion. The heterodimeric endonuclease is also involved in recombinational DNA repair and in the repair of inter-strand crosslinks. Mutations in this gene result in cerebrooculofacioskeletal syndrome, and polymorphisms that alter expression of this gene may play a role in carcinogenesis. Multiple transcript variants encoding different isoforms have been found for this gene. The last exon of this gene overlaps with the CD3e molecule, epsilon associated protein gene on the opposite strand. [provided by RefSeq]

**Synonyms:**

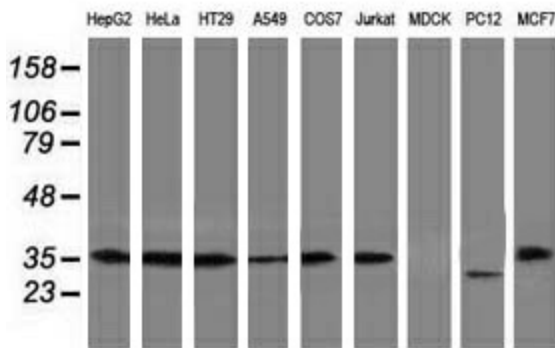
COFS4; RAD10; UV20

**Protein Families:**

Druggable Genome

**Protein Pathways:**

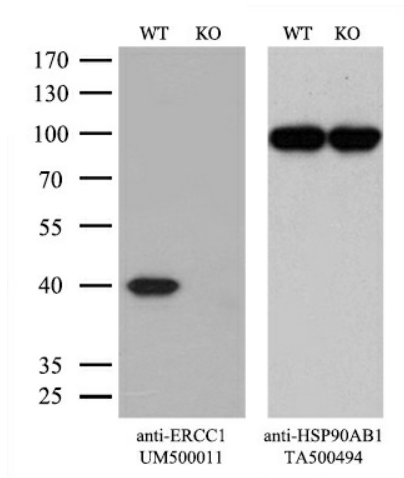
Nucleotide excision repair

**Product images:**


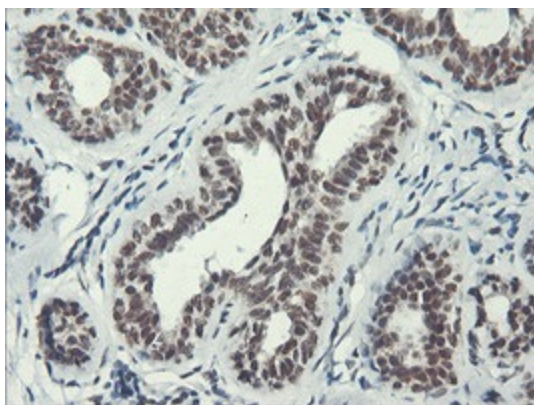
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ERCC1 monoclonal antibody (Clone 2E12).



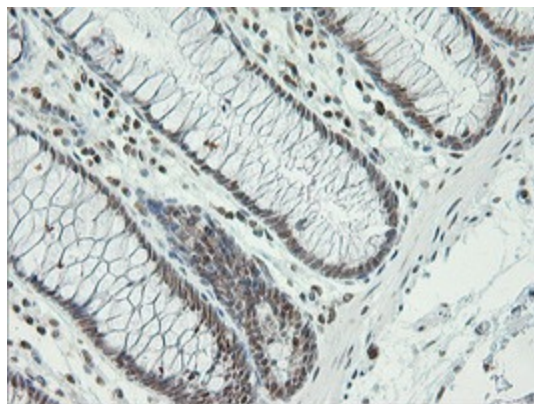
Western Blot analysis of 10 different human tissue lysates (10ug) by using anti-ERCC1 monoclonal antibody (clone 2E12, 1:500)



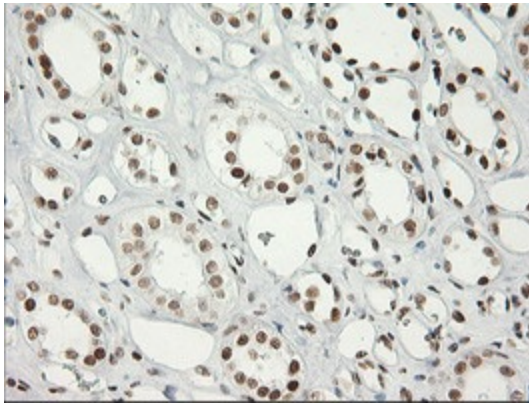
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ERCC1-Knockout HeLa cells (KO, Cat# [LC810072]) were separated by SDS-PAGE and immunoblotted with anti-ERCC1 monoclonal antibody UM500011. Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control (1:500).



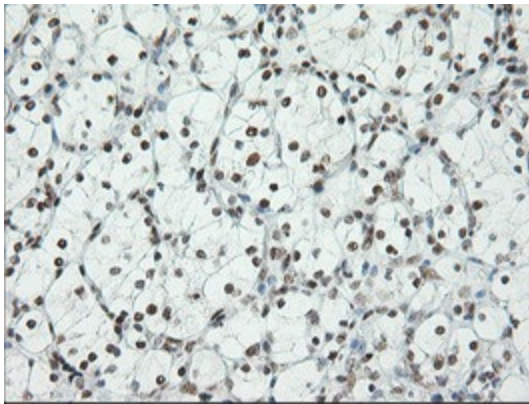
Immunohistochemical staining of paraffin-embedded Human breast tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



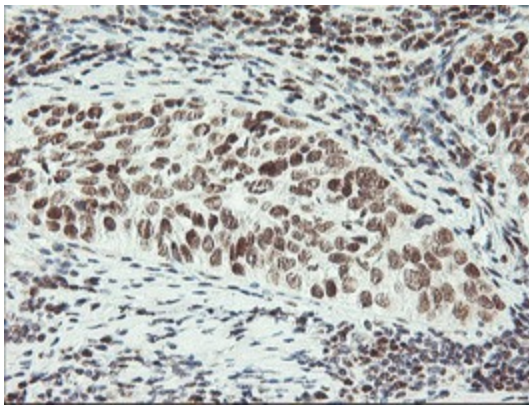
Immunohistochemical staining of paraffin-embedded Human colon tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



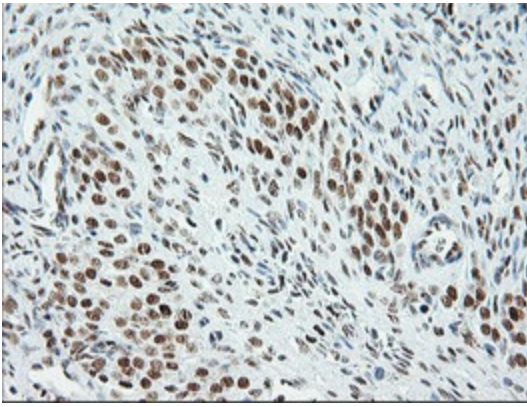
Immunohistochemical staining of paraffin-embedded Human Kidney tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



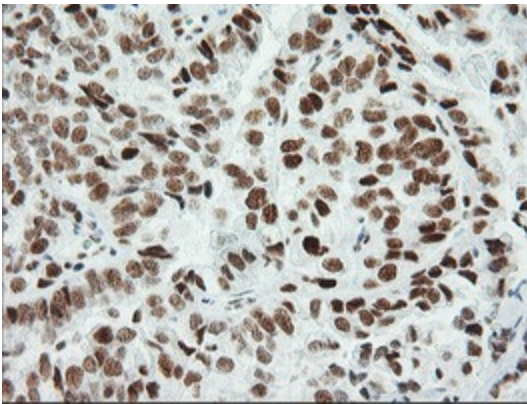
Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



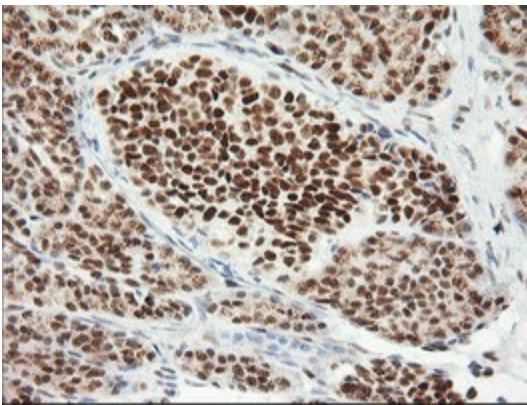
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



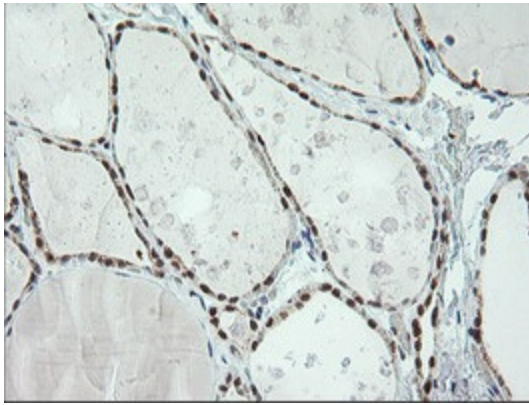
Immunohistochemical staining of paraffin-embedded Human Ovary tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



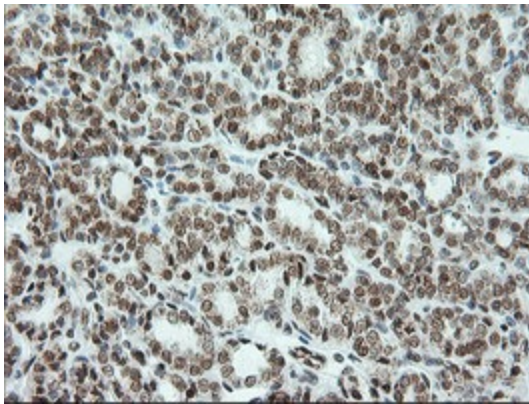
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



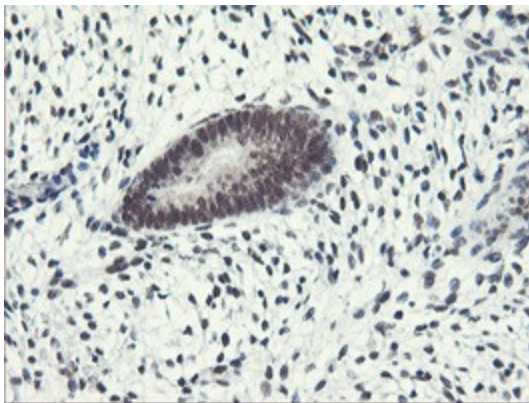
Immunohistochemical staining of paraffin-embedded Human pancreas tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



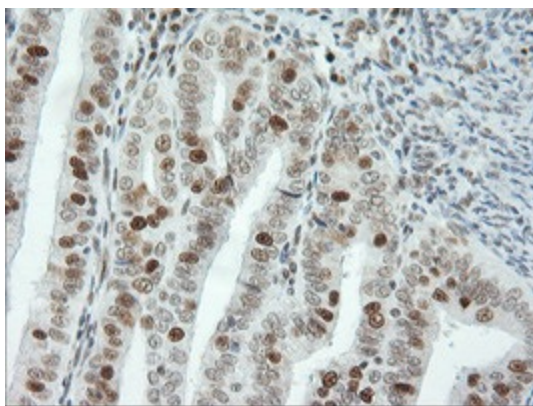
Immunohistochemical staining of paraffin-embedded Human thyroid tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



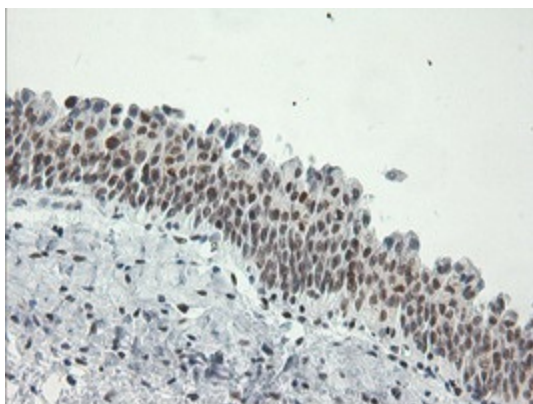
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



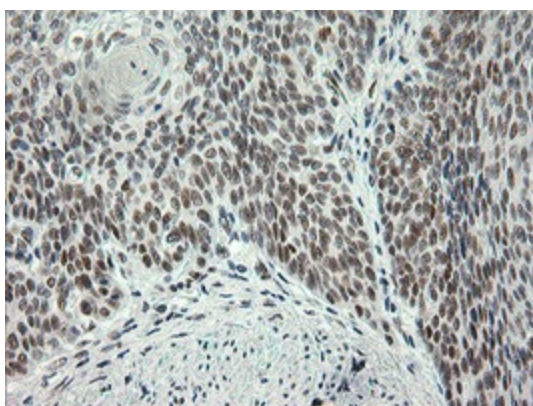
Immunohistochemical staining of paraffin-embedded Human endometrium tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



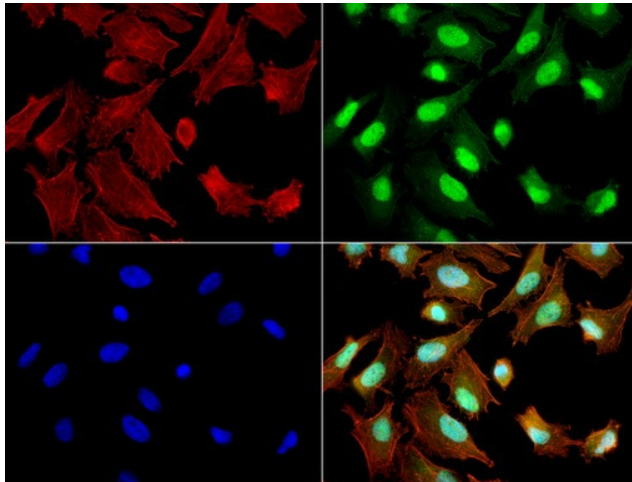
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



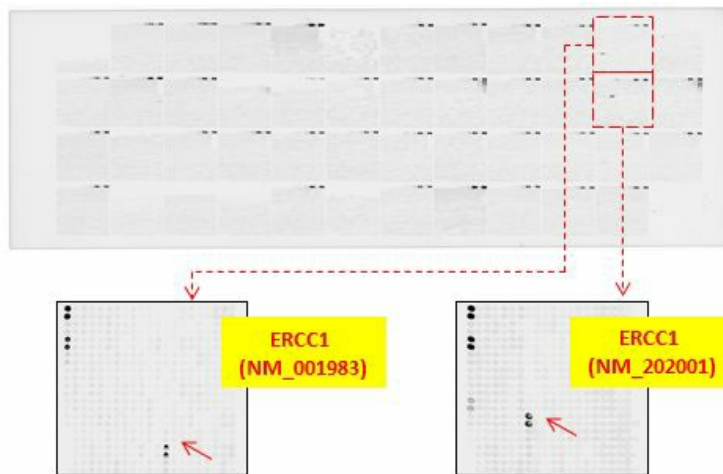
Immunohistochemical staining of paraffin-embedded Human bladder tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-ERCC1 mouse monoclonal antibody. (Clone 2E12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunofluorescent staining of HeLa cells using ERCC1 mouse monoclonal antibody ([UM500011], green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-ERCC1 mouse monoclonal antibody (Clone 2E12). The positive reactive proteins are highlighted with red arrows in the enlarged subarray. Other positive controls spotted in this subarray are serial dilutions of mouse IgG as controls.