

Product datasheet for CF501167

OriGene Technologies, Inc.

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ERCC1 Mouse Monoclonal Antibody [Clone ID: OTI1B3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1B3

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:50, IF 1:100, Flow: 1:50-1:100

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ERCC1 (NP_001974) 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: 32.6 kDa

Gene Name: ERCC excision repair 1, endonuclease non-catalytic subunit

Database Link: NP 001974

Entrez Gene 13870 MouseEntrez Gene 2067 Human

P07992





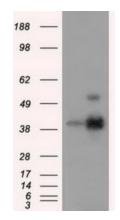
Background:

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.

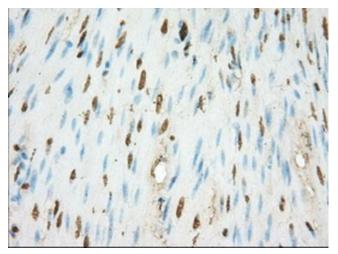
Synonyms: COFS4; RAD10; UV20
Protein Families: Druggable Genome

Protein Pathways: Nucleotide excision repair

Product images:

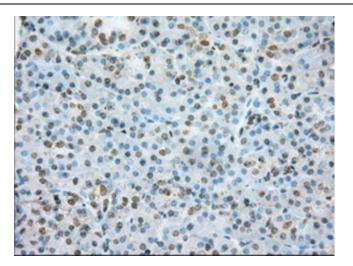


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ERCC1 ([RC200478], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ERCC1. Positive lysates [LY419605] (100ug) and [LC419605] (20ug) can be purchased separately from OriGene.

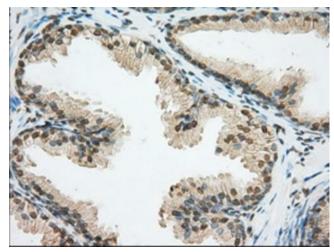


Immunohistochemical staining of paraffinembedded colon tissue within the normal limits using anti-ERCC1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

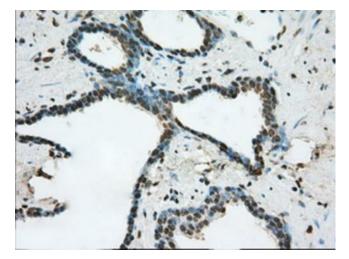




Immunohistochemical staining of paraffinembedded pancreas tissue within the normal limits using anti-ERCC1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

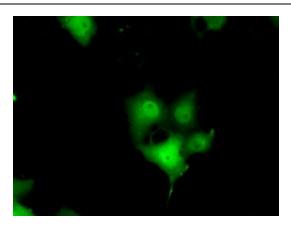


Immunohistochemical staining of paraffinembedded prostate tissue within the normal limits using anti-ERCC1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

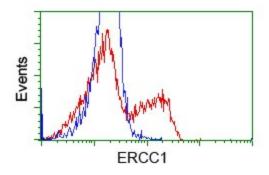


Immunohistochemical staining of paraffinembedded Carcinoma of prostate tissue using anti-ERCC1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

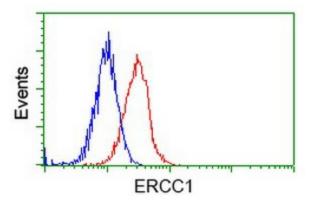




Anti-ERCC1 mouse monoclonal antibody ([TA501167]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ERCC1 ([RC200478]).



HEK293T cells transfected with either pCMV6-ENTRY ERCC1 ([RC200478]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-ERCC1 mouse monoclonal ([TA501167]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-ERCC1 antibody ([TA501167]), (Red), compared to a nonspecific negative control antibody, (Blue) at 1:100