**Product Name: KD-Validated ERCC1 Recombinant Rabbit Monoclonal Antibody**
**Catalog #: KVAb00192**
For research use only.

## Summary

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|---|---|
| **Description** | KO&KD-Validated antibody |
| **Host** | Rabbit |
| **Application** | WB,FCM,ICC |
| **Reactivity** | Human,M |
| **Conjugation** | Unconjugated |
| **Modification** | Unmodified |
| **Isotype** | Rabbit IgG |
| **Clonality** | Rabbit mAb |
| **Form** | Liquid |
| **Storage** | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| **Shipping** | Ice bags |
| **Buffer** | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide. |
| **Purification** | Affinity purification |

## Application

| | |
|---|---|
| **Dilution Ratio** | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| **Molecular Weight** | Calculated MW: 32.6kDa |

## Antigen Information

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|---|---|
| **Gene Name** | ERCC1 |
| **Alternative Names** | ERCC Excision Repair 1, Endonuclease Non-Catalytic Subunit; RAD10; Excision Repair Cross-Complementing Rodent Repair Deficiency, Complementation Group 1 (Includes Overlapping Antisense Sequence); Excision Repair Cross-Complementation Group 1; DNA Excision Repair Protein ERCC-1; COFS4; UV20 |
| **Gene ID** | 2067.0 |
| **SwissProt ID** | P07992 |
| **Immunogen** | A synthesized peptide derived from human ERCC1 |

## Background

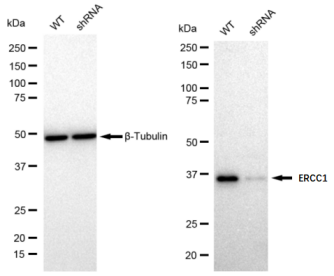
The product of this gene functions in the nucleotide excision repair pathway, and is required for the repair of DNA lesions such

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, Oct 2009]

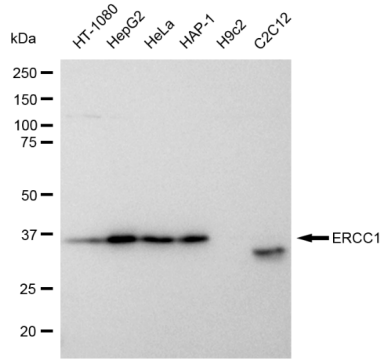
## Research Area

Epigenetics and Nuclear Signaling,Cancer

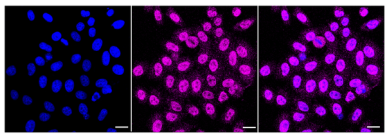
## Image Data



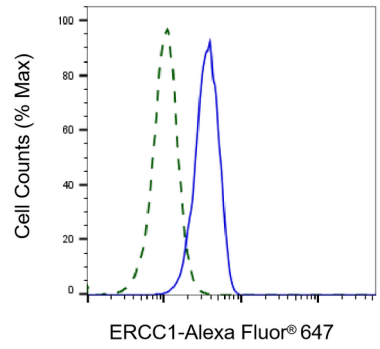

Western blotting analysis using ERCC1 antibody (KVAb00192). ERCC1 expression in wild type (WT) and ERCC1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ERCC1 antibody (KVAb00192, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



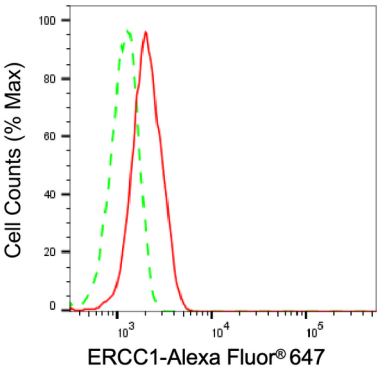

Western blotting analysis using ERCC1 antibody (KVAb00192). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ERCC1antibody (KVAb00192, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with ERCC1 antibody (KVAb00192, 1:1,000). Nuclei were stained blue with DAPI; ERCC1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.




Validation of ERCC1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ERCC1 antibody (KVAb00192, 1:2,000) and analyzed using CytoFLEX.




Flow cytometric analysis of ERCC1 expression in HepG2 cells using ERCC1 antibody (KVAb00192, 1:2,000). Green, isotype control; red, ERCC1.