

ERCC8 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16150**Specification**

ERCC8 Antibody - C-terminal region - Product Information

Application	WB
Primary Accession	Q13216
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43kDa KDa

ERCC8 Antibody - C-terminal region - Additional Information**Gene ID** 1161

Alias Symbol **ERCC8, CKN1, CSA,**
Other Names

DNA excision repair protein ERCC-8, Cockayne syndrome WD repeat protein CSA, ERCC8, CKN1, CSA

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 µl of distilled water. Final Anti-ERCC8 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

Precautions

ERCC8 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

ERCC8 Antibody - C-terminal region - Protein Information

Name ERCC8 {ECO:0000303|PubMed:19894250, ECO:0000312|HGNC:HGNC:3439}

Function

Substrate-recognition component of the CSA complex, a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex, involved in transcription-coupled nucleotide excision repair (TC-NER), a process during which RNA polymerase II-blocking lesions are rapidly removed from the transcribed strand of active genes (PubMed: [12732143](http://www.uniprot.org/citations/12732143) target="_blank">12732143, PubMed: [16751180](http://www.uniprot.org/citations/16751180) target="_blank">16751180, PubMed: [16964240](http://www.uniprot.org/citations/16964240) target="_blank">16964240, PubMed: [32142649](http://www.uniprot.org/citations/32142649) target="_blank">32142649, PubMed: [34526721](http://www.uniprot.org/citations/34526721) target="_blank">34526721, PubMed: [38316879](http://www.uniprot.org/citations/38316879) target="_blank">38316879, PubMed: [38600235](http://www.uniprot.org/citations/38600235) target="_blank">38600235)

target="_blank">38600235, PubMed:38600236). Following recruitment to lesion-stalled RNA polymerase II (Pol II), the CSA complex mediates ubiquitination of Pol II subunit POLR2A/RPB1 at 'Lys- 1268', a critical TC-NER checkpoint, governing RNA Pol II stability and initiating DNA damage excision by TFIIH recruitment (PubMed:12732143, PubMed:16751180, PubMed:16964240, PubMed:32142649, PubMed:32355176, PubMed:34526721, PubMed:38316879, PubMed:38600235, PubMed:38600236). The CSA complex also promotes the ubiquitination and subsequent proteasomal degradation of ERCC6/CSB in a UV-dependent manner; ERCC6 degradation is essential for the recovery of RNA synthesis after transcription-coupled repair (PubMed:16751180). Also plays a role in DNA double-strand breaks (DSSBs) repair by non-homologous end joining (NHEJ) (PubMed:29545921).

Cellular Location

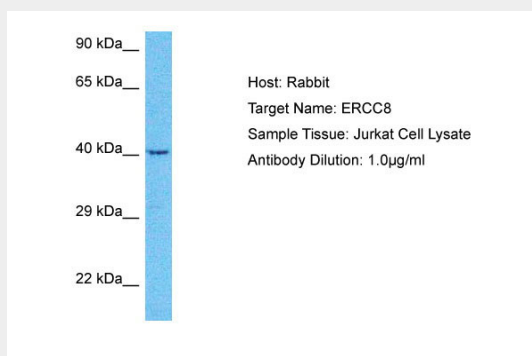
Nucleus. Chromosome Nucleus matrix. Note=Recruited to lesion- stalled RNA polymerase II (Pol II) sites by ERCC6/CSB (PubMed:32355176). UV-induced translocation to the nuclear matrix is dependent on ERCC6/CSB (PubMed:26620705).

ERCC8 Antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ERCC8 Antibody - C-terminal region - Images



Host: Rabbit
Target Name: ERCC8

Sample Tissue: Jurkat Whole Cell lysates
Antibody Dilution: 1.0µg/ml

ERCC8 Antibody - C-terminal region - Background

Substrate-recognition component of the CSA complex, a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex, involved in transcription-coupled nucleotide excision repair. The CSA complex (DCX(ERCC8) complex) promotes the ubiquitination and subsequent proteasomal degradation of ERCC6 in a UV-dependent manner; ERCC6 degradation is essential for the recovery of RNA synthesis after transcription-coupled repair. It is required for the recruitment of XAB2, HMGN1 and TCEA1/TFIIS to a transcription- coupled repair complex which removes RNA polymerase II-blocking lesions from the transcribed strand of active genes.

ERCC8 Antibody - C-terminal region - References

Henning K.A.,et al.Cell 82:555-564(1995).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Kalnina N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.