

# ERCC8 Antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI16150

## Product Information

Application	WB
Primary Accession	<a href="#">Q13216</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44055

## Additional Information

Gene ID	1161
Alias Symbol Other Names	ERCC8, CKN1, CSA, 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.

## 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: <a href="#">12732143</a> , PubMed: <a href="#">16751180</a> , PubMed: <a href="#">16964240</a> , PubMed: <a href="#">32142649</a> , PubMed: <a href="#">34526721</a> , PubMed: <a href="#">38316879</a> , PubMed: <a href="#">38600235</a> , PubMed: <a href="#">38600236</a> ). 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: <a href="#">12732143</a> , PubMed: <a href="#">16751180</a> , PubMed: <a href="#">16964240</a> , PubMed: <a href="#">32142649</a> , PubMed: <a href="#">32355176</a> , PubMed: <a href="#">34526721</a> , PubMed: <a href="#">38316879</a> , PubMed: <a href="#">38600235</a> ).

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).

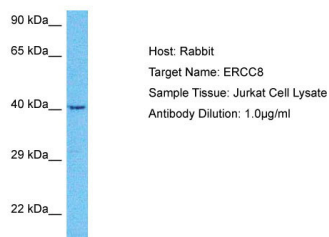
## Background

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, HMG1 and TCEA1/TFIIIS to a transcription- coupled repair complex which removes RNA polymerase II-blocking lesions from the transcribed strand of active genes.

## 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.

## Images



Host: Rabbit  
Target Name: ERCC8  
Sample Tissue: Jurkat Whole Cell lysates  
Antibody Dilution: 1.0µg/ml

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.