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ERCC8 Rabbit mAb

Catalog # AP76489

Product Information

Application	WB, IP
Primary Accession	Q13216
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	44055

Additional Information

Gene ID	1161
Other Names	ERCC8
Dilution	WB~~1:1000 IP~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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, PubMed:16751180, PubMed:16964240, PubMed:32142649, PubMed:34526721, PubMed:38316879, PubMed: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).

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.

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