

CSB Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55414**Specification****CSB Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q03468
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	168416

CSB Polyclonal Antibody - Additional Information**Gene ID** 2074**Other Names**

DNA excision repair protein ERCC-6, 3.6.4.-, ATP-dependent helicase ERCC6, Cockayne syndrome protein CSB, ERCC6 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=3438), CSB

Dilution

IHC-P~~N/A
IHC-F~~N/A
IF~~1:50~200
ICC~~N/A
E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

CSB Polyclonal Antibody - Protein Information**Name** ERCC6 {ECO:0000303|PubMed:1339317, ECO:0000312|HGNC:HGNC:3438}**Function**

Essential factor 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:[16246722](http://www.uniprot.org/citations/16246722), PubMed:[20541997](http://www.uniprot.org/citations/20541997), PubMed:[22483866](http://www.uniprot.org/citations/22483866), PubMed:[26620705](http://www.uniprot.org/citations/26620705), PubMed:[32355176](http://www.uniprot.org/citations/32355176))

target="_blank">32355176, PubMed:34526721, PubMed:38316879, PubMed:38600235, PubMed:38600236). Plays a central role in the initiation of the TC-NER process: specifically recognizes and binds RNA polymerase II stalled at a lesion, and mediates recruitment of ERCC8/CSA, initiating DNA damage excision by TFIIH recruitment (PubMed:32355176, PubMed:34526721, PubMed:38600235, PubMed:38600236). Upon DNA-binding, it locally modifies DNA conformation by wrapping the DNA around itself, thereby modifying the interface between stalled RNA polymerase II and DNA (PubMed:15548521). Acts as a chromatin remodeler at DSBs; DNA-dependent ATPase-dependent activity is essential for this function (PubMed:16246722, PubMed:9565609). Plays an important role in regulating the choice of the DNA double-strand breaks (DSBs) repair pathway and G2/M checkpoint activation; DNA-dependent ATPase activity is essential for this function (PubMed:25820262). Regulates the DNA repair pathway choice by inhibiting non-homologous end joining (NHEJ), thereby promoting the homologous recombination (HR)-mediated repair of DSBs during the S/G2 phases of the cell cycle (PubMed:25820262). Mediates the activation of the ATM- and CHEK2-dependent DNA damage responses thus preventing premature entry of cells into mitosis following the induction of DNA DSBs (PubMed:25820262). Remodels chromatin by evicting histones from chromatin flanking DSBs, limiting RIF1 accumulation at DSBs thereby promoting BRCA1-mediated HR (PubMed:29203878). Required for stable recruitment of ELOA and CUL5 to DNA damage sites (PubMed:28292928). Also involved in UV-induced translocation of ERCC8 to the nuclear matrix (PubMed:26620705). Essential for neuronal differentiation and neuritogenesis; regulates transcription and chromatin remodeling activities required during neurogenesis (PubMed:24874740).

Cellular Location

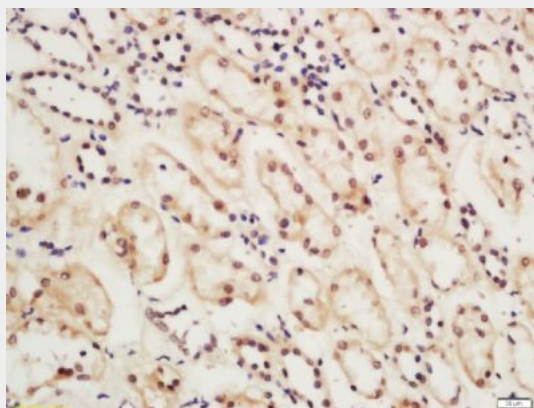
Nucleus. Chromosome Note=Recognizes and binds RNA polymerase II stalled at DNA damage sites.

CSB Polyclonal Antibody - 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](#)

CSB Polyclonal Antibody - Images



Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CSB Polyclonal Antibody, Unconjugated(bs-14082R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining