10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

XPD Rabbit mAb
Catalog # AP76265

Specification

XPD Rabbit mAb - Product Information

Application	**WB, ICC**
Primary Accession	P18074
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal Antibody**
Calculated MW	**86909**

XPD Rabbit mAb - Additional Information

Gene ID 2068

Other Names
ERCC2

Dilution
WB~~1/500-1/1000
ICC~~N/A

Format
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.

XPD Rabbit mAb - Protein Information

Name ERCC2

Synonyms XPD, XPDC

Function
ATP-dependent 5'-3' DNA helicase (PubMed:31253769, PubMed:8413672, PubMed:9771713). Component of the general transcription and DNA repair factor IIH (TFIIH) core complex, not absolutely essential for minimal transcription in vitro (PubMed:10024882, PubMed:17466626, PubMed:9771713). Required for transcription-coupled nucleotide excision repair (NER) of damaged DNA; recognizes damaged bases (PubMed:17466626, PubMed:23352696, PubMed:<a href="http://www.uniprot.org/citations/9771713"

target="_blank">9771713). Sequestered in chromatin on UV-damaged DNA (PubMed:23352696). When complexed to CDK-activating kinase (CAK), involved in transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. The ATP-dependent helicase activity of XPD/ERCC2 is required for DNA opening. Involved in DNA lesion verification (PubMed:31253769). In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription. XPD/ERCC2 acts by forming a bridge between CAK and the core-TFIIH complex. The structure of the TFIIH transcription complex differs from the NER-TFIIH complex; large movements by XPD/ERCC2 and XPB/ERCC3 are stabilized by XPA which allow this subunit to contact ssDNA (PubMed:31253769, PubMed:33902107). Involved in the regulation of vitamin-D receptor activity. As part of the mitotic spindle-associated MMXD complex it plays a role in chromosome segregation. Might have a role in aging process and could play a causative role in the generation of skin cancers.

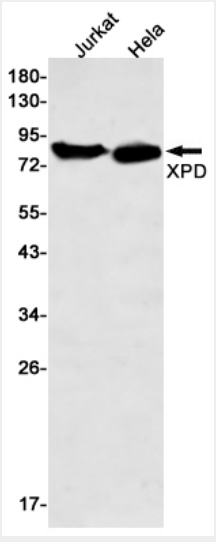
Cellular Location
Nucleus. Cytoplasm, cytoskeleton, spindle

XPD Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

XPD Rabbit mAb - Images



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999