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Anti-XPD Rabbit Monoclonal Antibody

Catalog # ABO15983

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P18074
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-XPD Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human.

Additional Information

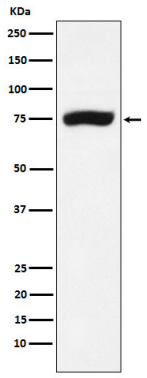
Gene ID	2068
Other Names	General transcription and DNA repair factor IIH helicase subunit XPD, TFIIH subunit XPD, 3.6.4.12, Basic transcription factor 2 80 kDa subunit, BTF2 p80, CXPD, DNA excision repair protein ERCC-2, DNA repair protein complementing XP-D cells, TFIIH basal transcription factor complex 80 kDa subunit, TFIIH 80 kDa subunit, TFIIH p80, Xeroderma pigmentosum group D-complementing protein, ERCC2, XPD, XPDC
Calculated MW	86909
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 25E62
Immunogen	A synthesized peptide derived from human XPD
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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: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

Images



Western blot analysis of XPD expression in A431 cell lysate.

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