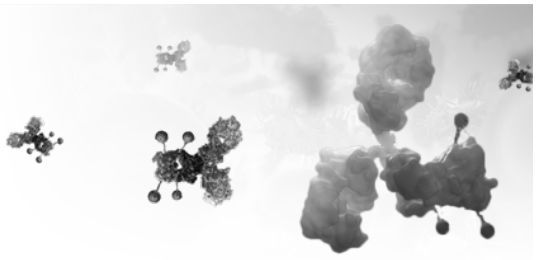

Anti-RAD23B (aa 163-176) polyclonal antibody (DPABH-05431)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to polyubiquitin chains. Proposed to be capable to bind simultaneously to the 26S proteasome and to polyubiquitinated substrates and to deliver ubiquitinated proteins to the proteasome. May play a role in endoplasmatic reticulum-associated degradation (ERAD) of misfolded glycoproteins by association with PNGase and delivering deglycosylated proteins to the proteasome.Involved in global genome nucleotide excision repair (GG-NER) by acting as component of the XPC complex. Cooperatively with CETN2 appears to stabilize XPC. May protect XPC from proteasomal degradation.The XPC complex is proposed to represent the first factor bound at the sites of DNA damage and together with other core recognition factors, XPA, RPA and the TFIIH complex, is part of the pre-incision (or initial recognition) complex. The XPC complex recognizes a wide spectrum of damaged DNA characterized by distortions of the DNA helix such as single-stranded loops, mismatched bubbles or single stranded overhangs. The orientation of XPC complex binding appears to be crucial for inducing a productive NER. XPC complex is proposed to recognize and to interact with unpaired bases on the undamaged DNA strand which is followed by recruitment of the TFIIH complex and subsequent scanning for lesions in the opposite strand in a 5-to-3 direction by the NER machinery. Cyclobutane pyrimidine dimers (CPDs) which are formed upon UV-induced DNA damage esacpe detection by the XPC complex due to a low degree of structural perurbation. Instead they are detected by the UV-DDB complex which in turn recruits and cooperates with the XPC complex in the respective DNA repair. In vitro, the XPC:RAD23B dimer is sufficient to initiate NER; it preferentially binds to cisplatin and UV-damaged double-stranded DNA and also binds to a variety of chemically and structurally diverse DNA adducts. XPC:RAD23B contacts DNA both 5 and 3 of a cisplatin lesion with a preference for the 5 side. XPC:RAD23B induces a bend in DNA upon binding. XPC:RAD23B stimulates the activity of DNA glycosylases TDG and SMUG1.
Immunogen	Synthetic peptide: ATDSTSGDSSRSNL conjugated to KLH, corresponding to amino acids 163-176 of Human hHR23b

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Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	WB, ELISA, IHC-P, ICC/IF
Format	Liquid
Size	50 µg
Buffer	pH: 7.20; Constituents: 0.27% Potassium phosphate, 0.88% Sodium chloride
Preservative	0.01% Sodium Azide
Storage	Store at 4°C or -20°C long term. Avoid repeated freeze / thaw cycles. Store undiluted.

GENE INFORMATION

Gene Name	RAD23B RAD24 homolog B (S. cerevisiae) [Homo sapiens]
Official Symbol	RAD23B
Synonyms	RAD23B; RAD23 homolog B (S. cerevisiae); P58; HR23B; HHR23B; UV excision repair protein RAD23 homolog B; RAD23, yeast homolog of, B; XP-C repair complementing protein; XP-C repair complementing complex 58 kDa; XP-C repair-complementing complex 58 kDa protein;
Entrez Gene ID	5887
Protein Refseq	NP_001231642.1
UniProt ID	B7Z4W4
Pathway	DNA Damage Recognition in GG-NER; Dual incision reaction in GG-NER; Global Genomic NER (GG-NER); Nucleotide excision repair.
Function	damaged DNA binding; polyubiquitin binding; protein binding; single-stranded DNA binding

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