Datasheet for ABIN1944896

anti-RAD23B antibody (N-Term)

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Overview

Quantity:	400 µL
Target:	RAD23B
Binding Specificity:	AA 1-409, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RAD23B antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This RAD23B antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 1-409 amino acids from the N-terminal region of human RAD23B.
Clone:	1228CT409-120-123-135
Isotype:	IgG1 kappa
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	RAD23B
Alternative Name:	RAD23B (RAD23B Products)
Background:	Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to

Target Details

	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 endoplasmic reticulum- associated degradation (ERAD) of misfolded glycoproteins by association with PNGase and delivering deglycosylated proteins to the proteasome. 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.
Molecular Weight:	43171
Gene ID:	5887
UniProt:	P54727
Pathways:	DNA Damage Repair

Application Details

Application Notes:	WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Publications

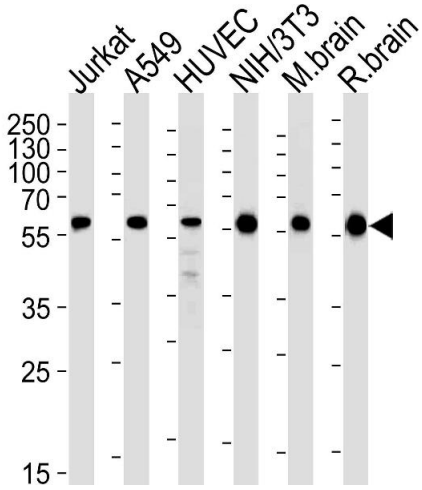
Product cited in:

Li, Wang, Xue, Pritchard, Wang: "Changes in the mitochondrial protein profile due to ROS eruption during ageing of elm (Ulmus pumila L.) seeds." in: **Plant physiology and biochemistry : PPB**, Vol. 114, pp. 72-87, (2017) (PubMed).

Hillier, Fulton, Fulton, Graves, Pepin, Wagner-McPherson, Layman, Maas, Jaeger, Walker, Wylie, Sekhon, Becker, OLaughlin, Schaller, Fewell, Delehaunty, Miner, Nash, Cordes, Du, Sun, Edwards et al.: "The DNA sequence of human chromosome 7. ..." in: **Nature**, Vol. 424, Issue 6945, pp. 157-64, (2003) (PubMed).

Evans, Scarpulla: "The human somatic cytochrome c gene: two classes of processed pseudogenes demarcate a period of rapid molecular evolution." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 85, Issue 24, pp. 9625-9, (1989) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of lysates from Jurkat, A549, HUVEC, mouse NIH/3T3 cell line and mouse brain, rat brain tissue lysates (from left to right), using RAD23B Antibody (N-term) (ABIN1944896 and ABIN2843646). (ABIN1944896 and ABIN2843646) was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.