

Certificate of Analysis

Product: Affinity Purified Anti-HR23B (Goat)

Code: 600-101-391

Lot #: 13918cr

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 1.1 mg/ml (by UV absorbance at 280 nm)

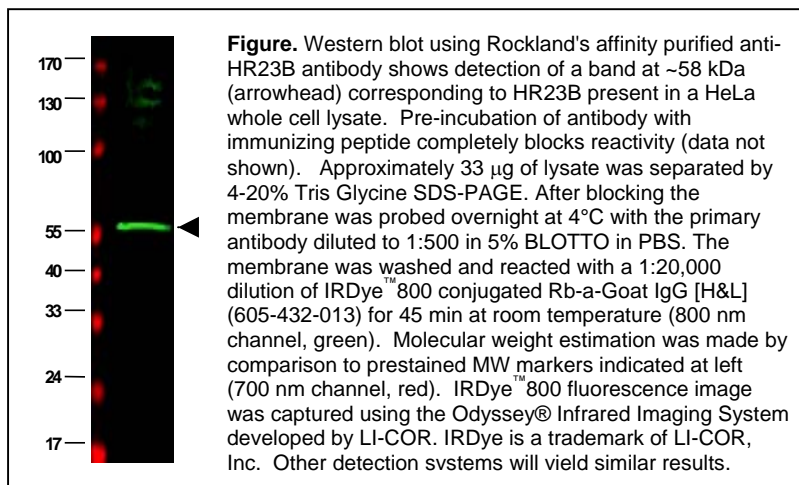
Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background Information: HR23B (also known as UV excision repair protein RAD23 homolog B, XP-C repair complementing complex 58 kDa protein and p58) is one of two human homologs of *Saccharomyces cerevisiae* Rad23 (hHR23A and hHR23B), a protein involved in nucleotide excision repair (NER). This protein was shown to interact with, and elevate the nucleotide excision activity of 3-methyladenine-DNA glycosylase (MPG), which suggested a role in DNA damage recognition in base excision repair. This protein contains an N-terminal ubiquitin-like domain, which was reported to interact with 26S proteasome, as well as with ubiquitin protein ligase E6AP, and thus suggests that this protein may be involved in the ubiquitin mediated proteolytic pathway in cells.



Application Note(s): This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 58 kDa in size corresponding to HR23B by western blotting in the appropriate cell lysate or extract.

Recommended Dilutions:	ELISA	1:2,000 - 1:10,000
	WESTERN BLOT	1:500 - 1:2,000
	IF MICROSCOPY	User Optimized
	OTHER APPLICATIONS	User Optimized

Purity and Specificity: This is an affinity-purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human HR23B protein. Sequence homology as assessed by BLAST indicated 100% homology for this protein from human, dog, chimpanzee and *S. cerevisiae*. Cross reactivity with HR23B protein from mouse and rat may also occur as sequence homology varies by one amino acid residue in this sequence by BLAST analysis. Reactivity with HR23B protein from other sources is not known.

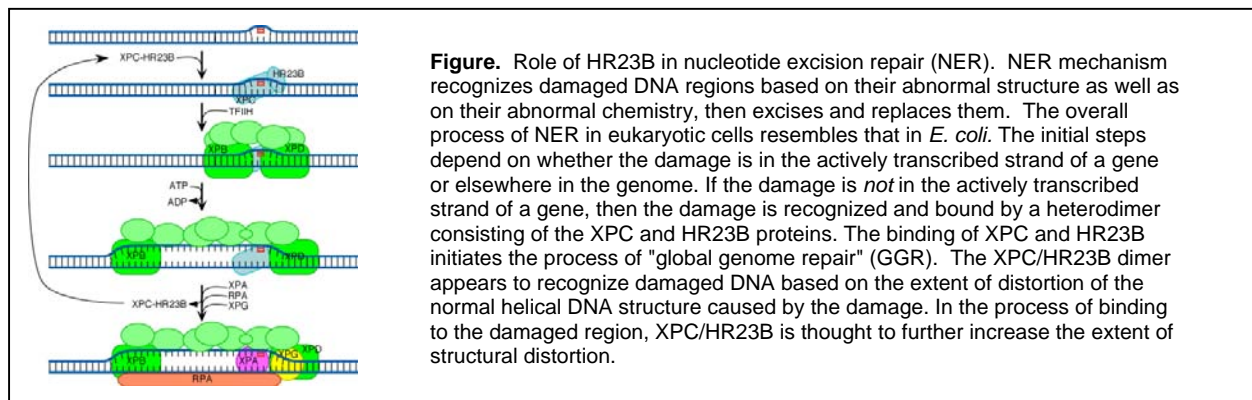
Relevant Link(s): Swiss Prot: [P54727](#)

NCBI Link [NP_002865](#)

Immunogen: This affinity purified antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding aa 163-176 of human HR23B protein.

Protein Sequence: Human HR23B protein, 409 aa, predicted MW 43.2 kDa

1	mqvtlklqq	qtfkididpe	etvkalkeki	esekgkdafp	vagqkliyag	kilnddtalk
61	eykideknfv	vvmvtpkpv	stpatttqq	sapasttvt	sstttvaqa	ptpvpalapt
121	stpasitpas	atassepapa	saakqekpae	kpaetpvats	ptatdstsgd	ssrsnlfeda
181	tsalvtgqsy	enmvteism	gyereqvaa	lrasfnnpdr	aveyllmgip	gdresqavvd
241	ppqaastgap	qssavaaaaa	tttattttts	sgghpleflr	nqpqfqmrrq	iiqqnpsllp
301	allqqigren	pqlqqisqh	qehfiqlmne	pvqeaggqgg	gggggsggia	eagsgghmnyi
361	qvtpqekeai	erlkalgfpe	glviqayfac	eknenlaanf	llqnfded	



General References:

- Huang,X., Wang,H., Xu,M., Lu,L., Xu,Z., Li,J., Zhou,Z. and Sha,J. (2004) Expression of a novel RAD23B mRNA splice variant in the human testis. *J. Androl.* **25** (3), 363-368.
- Fujiwara,K., Tenno,T., Sugawara,K., Jee,J.G., Ohki,I., Kojima,C., Tochio,H., Hiroaki,H., Hanaoka,F. and Shirakawa,M. (2004) Structure of the ubiquitin-interacting motif of S5a bound to the ubiquitin-like domain of HR23B. *J. Biol. Chem.* **279** (6), 4760-4767.
- Glockzin,S., Ogi,F.X., Hengstermann,A., Scheffner,M. and Blattner,C. (2003) Involvement of the DNA repair protein hHR23 in p53 degradation. *Mol. Cell. Biol.* **23** (24), 8960-8969.
- Ng,J.M. et al. (2003) A novel regulation mechanism of DNA repair by damage-induced and RAD23-dependent stabilization of xeroderma pigmentosum group C protein. *Genes Dev.* **17** (13), 1630-1645.
- van der Spek,P.J. et al. (1996) XPC and human homologs of RAD23: intracellular localization and relationship to other nucleotide excision repair complexes. *Nucleic Acids Res.* **24** (13), 2551-2559.
- van der Spek,P.J. et al. (1994) Chromosomal localization of three repair genes: the xeroderma pigmentosum group C gene and two human homologs of yeast RAD23. *Genomics* **23** (3), 651-658.

Related Products:

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|--------------|--|
| #600-101-291 | Affinity Purified Anti-Human HHR23A (RAD23A) (Goat) |
| #600-101-391 | Affinity Purified Anti-Human HHR23B (RAD23B) (Goat) |
| #605-703-125 | Peroxidase Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX |
| #605-732-125 | IRDye800 Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX |
| #B501-0500 | 500 g BLOTTO |
| #BSA-30 | 500 ml 30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer) |
| #MB-070 | Blocking Buffer for Fluorescent Western Blotting |
| #KIA-004 | MaxTag TM Anti-GOAT IgG Kit for Immunoblotting |

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.