

Certificate of Analysis**Product:** Affinity Purified Anti-Human BACH1 (Rabbit)**Code:** 600-401-458**Lot #:** 13315**Size:** 100 µg**Physical State:** Liquid (sterile filtered)**Antibody Concentration:** 1.0 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: BACH1 (also known as BRCA1 interacting protein C-terminal helicase 1, BRCA1-interacting protein 1 and BRCA1-associated C-terminal helicase 1) is a member of the RecQ DEAH helicase family and interacts with the BRCT repeats of breast cancer, type 1 (BRCA1). The bound complex is important in the normal double-strand break repair function of breast cancer, type 1 (BRCA1). The BACH1 gene may be a target of germline cancer-inducing mutations. BACH1 is localized within the nucleus and functions as a DNA-dependent ATPase and 5' to 3' DNA helicase. Two isoforms have been identified for this protein.

Recommended Dilutions:

ELISA	1:10,000 - 1:44,000
WESTERN BLOT	1:500 - 1:2,000
IF MICROSCOPY	User Optimized
OTHER APPLICATIONS	User Optimized

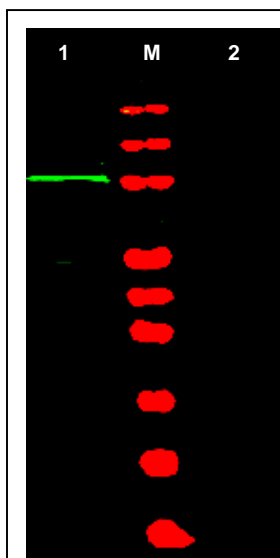


Figure. Western blot using Rockland's Affinity Purified anti-BACH1 antibody shows detection of a band at ~105 kDa (lane 1) corresponding to human BACH1 present in a 293 whole cell lysate (arrowhead). Lane 2 shows that specific band staining is competed out when the antibody is pre-incubated with the peptide immunogen prior to reaction. Approximately 35 µg of lysate was separated on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,000. Reaction occurred 2 h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye™ 800 conjugated Gt-a-Rabbit IgG [H&L] MX (611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). IRDye™ 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Application Note(s): This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 105 -140 kDa in size corresponding to isoforms of BACH1 protein by western blotting in the appropriate cell lysate or extract.

Purity and Specificity: This affinity purified antibody is directed against human BACH1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with BACH1 protein from human (100% homology) and chimpanzee (92% homology). Expect reactivity with isoform 1 and isoform 2 of BACH1. Reactivity against BACH1 homologues from rat and mouse is not expected. Reactivity against homologues from other sources is not known.

Relevant Link(s): Swiss Prot: [Q9BX63](#) NCBI Link [NP_114432](#)

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids 92-104 of isoform 1 of human BACH1 protein.

Protein Sequence: Human BACH1 (isoform 1), 1249 aa, predicted MW 140.8 kDa

1	mssmwseyti	ggvkiyfyk	aypsqlammn	silrglnsq	hcllesptgs	gkslallcsa
61	lawqqslsgk	padegvseka	evqlscccac	hskdftndm	nqgtsrhfny	pstppserng
121	tsstcqdspe	ktllaaklsa	kkqasiyrde	nddfqvekk	irpletqqi	krhcfgtgv
181	hnlidakvdsg	ktvklinsple	kinsfspqkp	pghcsrcccs	tkqgnsqess	ntikkdhtgk
241	skipkiyfgt	rthkqiajit	relrrtaysg	vpmtlssrd	htcvhpevvg	nfnrnekcme
301	lldgkngksc	yfyhgvhkis	dqhtlqtfgg	mckawdieel	vslgkklkac	pyytareliq
361	dadiifcpyn	yldaaires	mdlnlkeqyv	ildeahnied	caresasysv	tevqlrfard
421	eldsmvnnni	rkkdheplra	vccslinwle	anaeylverd	yesackiwsg	nemlltlhkm
481	gittatfpil	qghfsavlqk	eekispiykg	eearevvis	astqimlkgf	fmvldylfrq
541	nsrfaddyki	aiqqtyswt	qidisdngl	lvipknkrs	rqrtavhvl	fwclnpavaf
601	sdingkvqti	vltsqglspm	kfsfseglvt	ftiqleanhi	iknsqvwvgt	igsgpkgrnl
661	catfqntetf	efqdevgall	lsvcqtvsqg	ilcflpsykl	leklerwls	tgilwhnlelv
721	ktvivepqgg	ektnfdellq	vyydaikykg	ekdgallvav	crqkvsegl	fsddnaravi
781	tigipfpnvk	dlqvelkrqy	ndhhsklrgl	lpgqrwyeyi	ayralnqalg	rcirhrndwg
841	alilvddrfr	nnpstryisgl	skwvrrqiqh	hstfesales	laefskkhqk	vlrvsikdr
901	niqdnestle	vtslkystpp	ylleaashls	penfvedeak	icvqelqcpk	iitknsplps
961	siisrkeknd	pvfleeagka	ekivisrsts	ptfnkqtkrv	swsfnslgq	yftgkipkat
1021	pelgssensa	sspprfktek	mesktvlpft	dkcessnlv	ntsfqscps	etiisslkid
1081	atlrknhse	hplcseeald	pdielslvse	edkqstsnrd	feteaedesi	yftpelydpe
1141	dtdeekndla	etdrnrlan	nsdcilakdl	feirtikevd	sarevkaedc	idtklglilh
1201	ieeskiddid	gnvkttwine	lelgktheie	iknfpkpsk	nkgmfpgfk	

General References:

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#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-003	MaxTag [™] Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

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