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by life technologies™

CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody – Purified

Publication Part no. MAN0005264 **Rev. Date:** 17 October 2011

Catalog Number: 701120 **Store at 2–8°C**

Clonality:	Monoclonal	**Host/Class**:	Rabbit IgG
Concentration:	0.5 mg/mL	**Reactivity**:	Human CREB
Quantity:	100 µg	**Predicted Reactivity**:	Human
Volume:	200 µL		

Product Description

CREB (cAMP responsive element binding protein) encodes for a 43 kDa protein transcription factor and belongs to leucine zipper family. CREB binds to the cyclic-AMP response element (CRE, a sequence present in many viral and cellular promoters) as a homodimer. Phosphorylated form of CREB act as an inducer of transcription for the genes, upon hormone dependent stimulation of cyclic-AMP pathway. CREB is known to play important role in circadian rythm generation and memory formation; aberration in CREB-mediated gene expression has been linked with Alzheimer disease. In humans, the gene is located on the q arm of chromosome 2.

Product Specifications

Immunogen:	Recombinant protein corresponding to amino acids 222–341 of Human cAMP responsive element binding protein
Alternate Names:	CREB 1
Apparent MW:	~43 kDa
Gene ID:	1385
Protein Accession No.:	P16220
Sequence Identity:	Human
Clone/PAD:	3H8L15
Lot:	See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	K562 cells	1–3 µg/mL
Immunocyto chemistry	Human	HeLa cells	1–3 µg/mL
Indirect ELISA	Human	Recombinant protein	1.5 x 10^{-4} to 3 µg/mL

Storage and Handling

Store the antibody at 2–8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

Stability

Expires one year from date of receipt when stored as instructed.

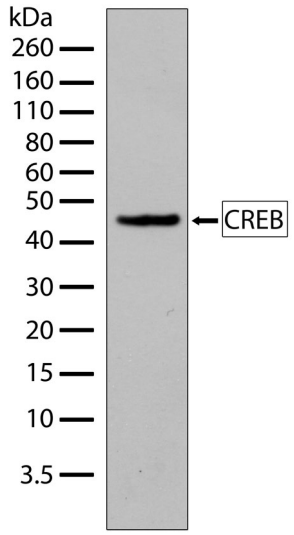

Figure 1 Western blot analysis of CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701120). Western blot analysis was performed on whole cell extracts of K562. Endogenous CREB protein was detected at ~43 kDa using CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody at 1 µg/mL. The blot was developed using chemiluminescence (ECL) method.

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@invitrogen.com

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

Safety Data Sheets (SDS)

Safety Data Sheets (SDSs) are available at **www.invitrogen.com/sds**.

Certificate of Analysis

The Certificate of Analysis provides detailed quality control and product qualification information for each product. Certificates of Analysis are available on our website. Go to **www.invitrogen.com/support** and search for the Certificate of Analysis by product lot number, which is printed on the box.

Related Products

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze™ Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze™ Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 µm	20/pack	LC2000

Explanation of symbols

Symbol	Description	Symbol	Description
REF	Catalogue Number	LOT	Batch code
RUO	Research Use Only	IVD	*In vitro* diagnostic medical device
	Use by		Temperature limitation
	Manufacturer	EC REP	European Community authorised representative
[-]	Without, does not contain	[+]	With, contains
protect from Light	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

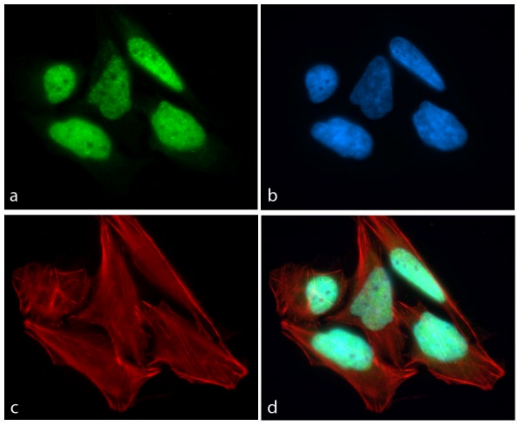

Figure 2 Immunocytochemistry analysis of CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701120). Immunocytochemistry analysis of serum starved HeLa cells treated with insulin (100 ng/mL for 15 minutes), and stained with CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody, using **a**: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b**: DAPI was used to stain the nucleus (blue), and **c**: Alexa Fluor® 594 phalloidin was used to stain actin (red). **d**: Composite image of cells showing nuclear localization of CREB.

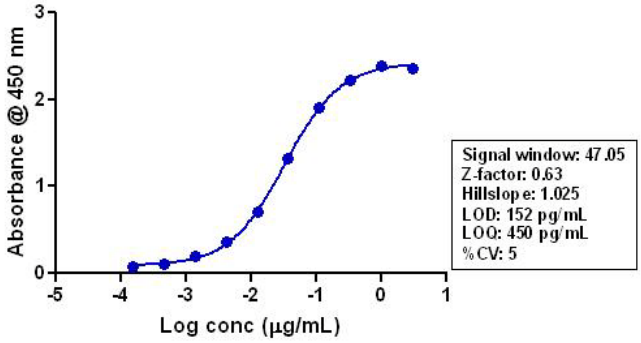

Figure 3 Indirect ELISA of CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701120). Indirect ELISA was performed using various dilutions of CREB ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701120) to detect recombinant CREB protein coated onto the plate. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

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