

AB-PN577

CREB1-pS129+pS133 Antibody

Phosphosite-specific rabbit polyclonal antibody for CREB1



KINEXUS

Website: www.kinexus.ca
Email: info@kinexus.ca
Phone: 604-323-2547

Address: 8755 Ash Street, Suite 1
Vancouver, British Columbia,
Canada V6P 6T3

Target Protein

Protein Name Long:	cAMP-response element-binding protein 1
Protein Alias:	CAMP responsive element binding protein 1; CAMP-response element binding protein; CREB1; CREB-1
UniProt ID:	P16220
Protein Molecular Mass:	36,688 Da (341 AA; P16220-1); 35,136 Da (327 AA; P16220-2); 25,445 Da (230 AA; P16220-3)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human CREB1
Antibody Immunogen Sequence:	EIL(pS)RRP(pS)YRK(βA)C
Antibody Immunogen Description:	Corresponds to amino acid residues E126 to K136. S129 and S133 phosphorylation stimulate transcriptional activity and induce interactions with CBP, DNA, MEIS1, Myb, Nur77, RGS13, SOX9 and p300. S129 is a minor <i>in vivo</i> phosphorylation site in CREB1 (≥2 reports from high throughput mass spectrometry reports recorded in PhosphoSitePlus), but S133 is the major site (≥65 reports). CREB1 is known to be phosphorylated <i>in vitro</i> at S129 by BARK2 (GRK3, ADRBK2), GSK3a, and GSK3b, and at S133 by Akt1 (PKBa), Btk, CaMK1a, CaMK2a, CaMK4, DYRK3, MAPKAPK2, MSK1 (RPS6KA5), MSK2 (RPS6KA4), PKACa (PRKACA), PKCa (PRKCA), PKCe (PRKCE), PKD1 (PRKCM, PRKD1), RSK1 (RPS6KA1), RSK2 (RPS6KA3), RSK3 (RPS6KA2), SGK1, TSSK4, and VRK1.
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	The immunizing peptide was produced by solid phase synthesis on a multipеп peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
Amount:	25 µg
Antibody Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerasol

Storage Conditions:	For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human Chimpanzee Rat Mouse

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987