

AB-PN691

CAD-pS1859 Antibody

Phosphosite-specific rabbit polyclonal antibody for CAD



KINEXUS

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Target Protein

Protein Name Long:	Aspartate carbamoyltransferase
Protein Alias:	Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase; EC 2.1.3.2; EC 3.5.2.3; EC 6.3.5.5; PYR1
UniProt ID:	P27708
Protein Molecular Mass:	242,984 Da (2,225 AA)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human CAD
Antibody Immunogen Sequence:	HRA(pS)DPG(β)C
Antibody Immunogen Description:	Corresponds to amino acid residues H1856 to G1862. S1859 phosphorylation stimulates enzyme activity. This is the major <i>in vivo</i> phosphorylation site in CAD (≥ 162 reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). However, This human phosphosite is not highly conserved in nature, but is found in the rhesus monkey. CAD is known to be phosphorylated at this site <i>in vitro</i> by PKAcA (PRKACA), and p70 S6Kb (RPS6KB1).
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 multipепptide 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 μ g
Antibody Concentration:	0.5 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 $+4^{\circ}\text{C}$ 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 Hamster

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