

AB-PN718

PKM2-pS37 Antibody

Phosphosite-specific rabbit polyclonal antibody for PKM2



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Target Protein

Protein Name Long:	Pyruvate kinase isozymes M1/M2
Protein Alias:	CTHBP; Cytosolic thyroid hormone-binding protein; EC 2.7.1.40; KP YM; PKM; Pyruvate kinase 2/3; Pyruvate kinase M; Pyruvate kinase muscle isozyme; Pyruvate kinase, M2 isozyme
UniProt ID:	P14618
Protein Molecular Mass:	57,937 Da (531 AA; P14618-1); 58,062 Da (531 AA; P14618-2); 56,273 Da (516 AA; P14618-3)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human PKM2
Antibody Immunogen Sequence:	DID(pS)API(βA)C
Antibody Immunogen Description:	Corresponds to amino acid residues D34 to I40. S37 phosphorylation stimulates enzyme activity, induces interaction with ERK1 and ERK2, and inhibit interaction with CTNNB1. This is one of the major <i>in vivo</i> phosphorylation sites in PKM2 (≥67 reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). This human phosphosite is highly conserved in vertebrates and also found in the fruit fly. PKM2 is known to be phosphorylated at this site <i>in vitro</i> by Akt1, and ERK2 (MAPK1).
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 multi-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:	0.4 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerosal
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 Rhesus macaque Dog Rat Mouse Chicken Zebra fish

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