

Datasheet for 600-401-X32**Troponin I (cardiac) Phospho S23/24 Antibody****Overview**

Description:	Anti-Troponin I (cardiac) pS23/24 (RABBIT) Antibody - 600-401-X32
Item No.:	600-401-X32
Size:	100 µL
Applications:	WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Troponin I (cTnI) is 1 of 3 subunits, along with troponin C (TnC) and troponin T (TnT) of troponin complex found in cardiac muscle. cTnI binds to actin in thin myofilaments to hold the troponin-tropomyosin complex in place, and when cTnI is phosphorylated by protein kinase C and protein kinase A at Ser23/24 it causes regulation of Ca ²⁺ -stimulated ATPase. Evidence suggests that phosphorylation of both serines 23 and 24 is required for the reduction in Ca ²⁺ -sensitivity and beneficial for relaxation of the heart. Ser23/24 phosphorylation is important for enhanced relaxation in response to prolonged activation of protein kinase C by endothelin in intact myocytes, while Thr144 plays an important role in the acute acceleration of relaxation. Troponin I pS23/24 Antibody is ideal for researchers interested in cancer research.
Synonyms:	Troponin I cardiac muscle, Cardiac troponin I
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Tnni3
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Phospho-Ser23/24 Troponin (cardiac) Antibody was produced in rabbits by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Ser23/24 of mouse cardiac troponin I conjugated to KLH.
Purity/Specificity:	Anti-Phospho-Ser23/24 Troponin (cardiac) Antibody is directed against Troponin protein phosphorylated at S23 and S24. The antibody was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. This antibody is specific for phosphorylated Troponin. Minimal reactivity occurs against non-phosphorylated Troponin. Reactivity against Troponin occurs from mouse sources. However, reactivity is also expected against human and non-human primate based on 100% sequence homology.
Relevant Links:	• UniProtKB - P48787 • GeneID - 21954 • NCBI - NP_033432.1

Application Details

Tested Applications:	WB
Application Note:	Anti-Phospho-Ser23/24 Troponin (cardiac) Antibody has been tested in Western Blots and is specific for the ~25 kDa cardiac troponin I protein phosphorylated at Ser 23/24. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

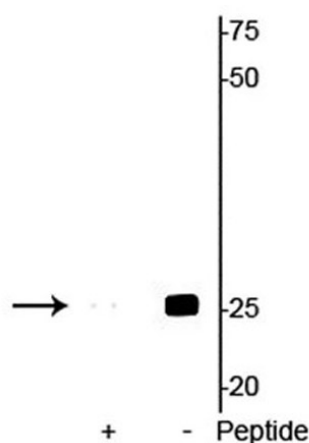
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	Sufficient to run approximately 10 tests
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Preservative:	None
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western blot of Anti-Troponin I (cardiac) pS23/24 Antibody. Mouse heart lysate showing specific immunolabeling of the ~25 kDa cardiac troponin I protein phosphorylated at Ser23/24 in the second lane (-). Phosphospecificity is shown in the first lane (+) where immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide (not shown).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.