

Datasheet for 500-301-263**Phosphothreonine Antibody****Overview**

Description:	Anti-PhosphoThreonine (pT) Monoclonal Antibody - 500-301-263
Item No.:	500-301-263
Size:	100 µL
Applications:	ELISA, WB
Reactivity:	Phosphothreonine
Host Species:	Mouse

Product Details

Background:	Phospho-Threonine Antibody detects proteins and peptides phosphorylated at threonine residues in a manner largely independent of the surrounding amino acid sequence. Phosphorylation of threonine residues is associated with many growth factors and oncogene protein kinases, and is important for cell signaling in activation, proliferation and differentiation.
Synonyms:	mouse anti-Phosphothreonine Antibody, mouse anti-pT antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	18F6
Format:	ASCITES

Target Details

Reactivity:	Phosphothreonine
Immunogen Type:	Other
Immunogen:	Phosphothreonine antibody was produced after repeated immunizations of balb/c mice with phosphothreonine conjugated KLH.
Purity/Specificity:	This product is clarified ascites produced in balb/c mice using clone 18F6. Reactivity is specific for phosphothreonine and minimal cross reactivity is observed against phosphoserine or phosphotyrosine.

Application Details

Tested Applications:	ELISA, WB
Application Note:	This monoclonal antibody has been tested in ELISA and Western Blot and reacts specifically with phosphothreonine and shows minimal reactivity by ELISA, and competitive ELISA, with phosphoserine or phosphotyrosine. The antibody reacts with free phosphothreonine, phosphothreonine conjugated to carriers such as thyroglobulin or BSA, as well as phosphothreonine in proteins of both unstimulated and stimulated cell lysates. Although not tested, this antibody is likely functional in RIA, flow cytometry, immunohistochemistry and immunoprecipitation. Phosphorylation of threonine residues is associated with many growth factors and oncogene protein kinases and is important for cell signaling in activation, proliferation and differentiation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:20,000
WB:	1:500 - 1:2,000

Formulation

Physical State:	Liquid (sterile filtered)
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

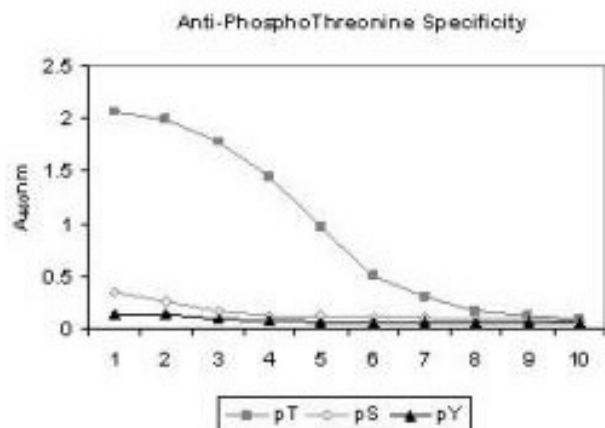
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Mab Anti-phosphothreonine Antibody(clone 18F6) is shown to detect threonine phosphorylation of proteins in a lysate from A431 cells stimulated with EGF (p/n W09-000-362). Separation is achieved under reducing conditions using a pre-cast 4-20% iGel from Gradipore, Inc. A 1:1,000 dilution of Mab anti-phosphothreonine is used for 30 min followed by detection using a 1:2,500 dilution of IRDye® 800 conjugated Goat-a-Mouse IgG [H&L] (p/n 610-132-121) and visualization using the Odyssey® Infrared Imaging System developed by LI-COR. Other detection systems will yield similar results. IRDye is a trademark of LI-COR, Inc.



ELISA

ELISA results of Mab anti-phosphothreonine antibody tested against BSA conjugates of pT, pY and pS. Each well was coated with 0.1µg of conjugate. The starting dilution of antibody was 1:1000 and each point on the X-axis represents a 2-fold dilution. HRP conjugated Gt-a-Mouse IgG (H&L) and TMB substrate were used for detection.

References

- Singleton KD et al. Glutamine induces heat shock protein expression via O-glycosylation and phosphorylation of HSF-1 and Sp1. *JPEN J Parenter Enteral Nutr.* (2008)

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.