

Datasheet for 600-401-X07**FMRP Phospho S499 Antibody****Overview**

Description:	Anti-FMRP pS499 (RABBIT) Antibody - 600-401-X07
Item No.:	600-401-X07
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Fragile X Mental Retardation Protein (FMRP) is an RNA-binding protein that plays an essential role in cognitive brain function. Mutations in the FMR1 gene, which codes for FMRP, can result in fragile X syndrome, autism, as well as other cognitive deficits. Phosphorylation of the highly conserved Ser499 has been shown to trigger hierarchical phosphorylation of nearby serines and may play a role in suppressing target mRNA translation. FMRP pS499 Antibody is ideal for researchers interested in neuroscience research.
Synonyms:	Fragile X mental retardation protein 1 homolog, FMR-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Fmr1
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Phospho-Ser499 FMRP Antibody was produced in rabbits by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Ser499 of rat FMRP conjugated to KLH.

Purity/Specificity: Anti-Anti-FMRP pS499 Antibody is directed against FMRP protein phosphorylated at S499. 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 FMRP. Minimal reactivity occurs against non-phosphorylated FMRP. Reactivity against FMRP occurs from rat sources. However, reactivity is also expected against bovine, canine, chicken, human, mouse, non-human primates, sheep, Xenopus, and zebra fish .

Relevant Links:

- [UniProtKB - Q80WE1](#)
- [GeneID - 24948](#)
- [NCBI - NP_434691.1](#)

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Phospho-Ser499 FMRP Antibody is tested for Western Blot and immunohistochemistry and is specific for the ~71 kDa FMRP protein phosphorylated at Ser499. Immunolabeling of the FMRP protein is completely eliminated by lambda-phosphatase. 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
IHC:	1:250-1:1000
WB:	1:1000

Formulation

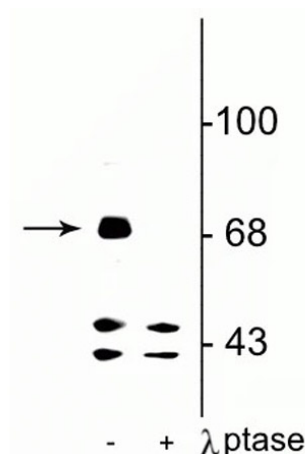
Physical State:	Liquid (sterile filtered)
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Preservative:	None
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

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-FMRP pS499 antibody.

Rat hippocampal lysate showing specific immunolabeling of the ~71 kDa FMRP protein phosphorylated at Ser499 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by lysate treatment with lambda phosphatase (400 units/100uL lysate for 30 min).

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.