

Datasheet for 600-401-X18**Olig2 Phospho S10/13/14 Antibody****Overview**

Description:	Anti-Olig2 pS10/13/14 (RABBIT) Antibody - 600-401-X18
Item No.:	600-401-X18
Size:	100 µL
Applications:	WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Olig2 is a well conserved bHLH transcription factor that shows both anti-neural functions and pro-neural functions at different stages in the formation of the oligodendrocyte lineage. Olig2 is expressed in 100% of the human diffuse gliomas irrespective of grade and required for intracranial tumor formation in a genetically relevant model of malignant glioma. A developmentally regulated triple serine motif at positions 10, 13 and 14 in the amino terminus is well conserved across species ranging from humans to zebrafish and is essential for Olig2 proliferative function in both normal and malignant neural progenitors. All three serine residues must be mutated to achieve a strong loss-of-function or gain-of-function phenotype, suggesting that the phosphorylation state of Olig2 represents a significant conformational change in the amino terminus. Olig2 pS 10/13/14 Antibody is ideal for researchers interested in neuroscience research.
Synonyms:	Oligodendrocyte transcription factor 2, Oligo2, Class B basic helix-loop-helix protein 1, bHLHb1, Class E basic helix-loop-helix protein 19, bHLHb19, Protein kinase C-binding protein 2, Protein kinase C-binding protein RACK17
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	OLIG2
Reactivity:	Mouse, Rat

PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Phospho-Ser10,13,14 Olig2 Antibody was produced in rabbits by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Ser10,13,14 of human Olig2 conjugated to KLH.
Purity/Specificity:	Anti-Phospho-Ser10,13,14 Olig2 Antibody is directed against human Olig 2 protein phosphorylated at S10/13/14. 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 Olig2. Minimal reactivity occurs against non-phosphorylated Olig2. Reactivity against Olig2 occurs from mouse sources. However, reactivity is also expected against guinea pig, human, non-human primate, mouse, rat and zebrafish based on 100% sequence homology.
Relevant Links:	• UniProtKB - Q13516 • GeneID - 10215 • NCBI - NP_005797.1

Application Details

Tested Applications:	WB
Application Note:	Anti-Olig2 pS10/13/14 Antibody is tested for Western Blots and is specific for the ~32 kDa Olig2 phosphorylated at Ser10, Ser13, and Ser14. 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

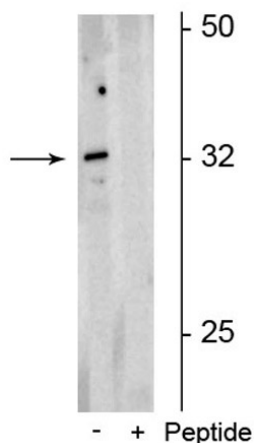
Formulation

Physical State:	Liquid (sterile filtered)
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-Olig2 pS10/13/14 Antibody.
 Rat neonatal brain lysate showing specific immunolabeling of the ~32 kDa form of the Olig2 protein phosphorylated at Ser10,13,14 in the first lane (-). Phosphospecificity is shown in the second lane (+) where Immunolabeling is blocked by the phosphopeptide used as the 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.