

OLIG2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18701C

Specification

OLIG2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q13516</u> <u>Q9EQW6</u>, <u>Q90XB3</u>, <u>NP_005797.1</u> Mouse Chicken Rabbit Polyclonal Rabbit IgG 32385 152-180

OLIG2 Antibody (Center) - Additional Information

Gene ID 10215

Other Names

Oligodendrocyte transcription factor 2, Oligo2, Class B basic helix-loop-helix protein 1, bHLHb1, Class E basic helix-loop-helix protein 19, bHLHe19, Protein kinase C-binding protein 2, Protein kinase C-binding protein RACK17, OLIG2, BHLHB1, BHLHE19, PRKCBP2, RACK17

Target/Specificity

This OLIG2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 152-180 amino acids from the Central region of human OLIG2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

OLIG2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

OLIG2 Antibody (Center) - Protein Information

Name OLIG2



Synonyms BHLHB1, BHLHE19, PRKCBP2, RACK17

Function Required for oligodendrocyte and motor neuron specification in the spinal cord, as well as for the development of somatic motor neurons in the hindbrain. Functions together with ZNF488 to promote oligodendrocyte differentiation. Cooperates with OLIG1 to establish the pMN domain of the embryonic neural tube. Antagonist of V2 interneuron and of NKX2-2-induced V3 interneuron development.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}. Cytoplasm. Note=The NLS contained in the bHLH domain could be masked in the native form and translocation to the nucleus could be mediated by interaction either with class E bHLH partner protein or with NKX2-2.

Tissue Location

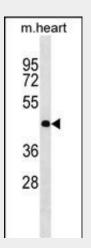
Expressed in the brain, in oligodendrocytes. Strongly expressed in oligodendrogliomas, while expression is weak to moderate in astrocytomas. Expression in glioblastomas highly variable

OLIG2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

OLIG2 Antibody (Center) - Images



OLIG2 Antibody (Center) (Cat. #AP18701c) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the OLIG2 antibody detected the OLIG2 protein (arrow).

OLIG2 Antibody (Center) - Background

This gene encodes a basic helix-loop-helix transcription factor which is expressed in oligodendroglial tumors of the brain. The protein is an essential regulator of ventral neuroectodermal



progenitor cell fate. The gene is involved in a chromosomal translocation t(14;21)(q11.2;q22) associated with T-cell acute lymphoblastic leukemia. Its chromosomal location is within a region of chromosome 21 which has been suggested to play a role in learning deficits associated with Down syndrome. [provided by RefSeq].

OLIG2 Antibody (Center) - References

Durand, K.S., et al. Mod. Pathol. 23(4):619-628(2010) Sims, R., et al. Neurosci. Lett. 461(1):54-59(2009) Hwang, D.H., et al. BMC Neurosci 10, 117 (2009) : Ishizawa, K., et al. Clin. Neuropathol. 27(3):118-128(2008) Ahn, S.M., et al. PLoS ONE 3 (12), E3917 (2008) :