

Anti-Olig1 Antibody

Catalog # ABO11523

Product Information

Application	WB
Primary Accession	Q8TAK6
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Oligodendrocyte transcription factor 1(OLIG1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	116448
Other Names	Oligodendrocyte transcription factor 1, Oligo1, Class B basic helix-loop-helix protein 6, bHLHb6, Class E basic helix-loop-helix protein 21, bHLHe21, OLIG1, BHLHB6, BHLHE21
Calculated MW	27905
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus .
Tissue Specificity	Expressed in the brain, in oligodendrocytes. Strongly expressed in oligodendrogliomas, while expression is weak to moderate in astrocytomas. Expression in glioblastomas is highly variable. .
Source	Eukaryota
Protein Name	Oligodendrocyte transcription factor 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Olig1(94-109aa ARPDAKEEQQLRRK), different from the related mouse and rat sequences by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 1 bHLH (basic helix-loop-helix) domain.

Protein Information

Name	OLIG1
Synonyms	BHLHB6, BHLHE21
Function	Orchestrates progenitor cell fates during cortical gliogenesis and gliomagenesis. In cooperation with OLIG2, activates oligodendrocyte precursor cells (OPCs) formation while repressing the generation of olfactory bulb interneuron intermediate progenitors (OBIN) through transcriptional regulation of GSX2. Mechanistically, binds and silences multiple conserved enhancer elements of GSX2. Cooperates with OLIG2 to establish the pMN domain of the embryonic neural tube (By similarity).
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00981}.
Tissue Location	Expressed in the brain, in oligodendrocytes. Strongly expressed in oligodendrogliomas, while expression is weak to moderate in astrocytomas. Expression in glioblastomas is highly variable.

Background

Oligodendrocyte transcription factor 1(OLIG1), also known as class B basic helix-loop-helix protein 6(BHLHB6) is a protein that in humans is encoded by the OLIG1 gene. This gene is mapped to 21q22.11. This gene is a member of the oligodendrocyte lineage gene family which encodes basic helix-loop-helix transcription factors. Studies in mice show that it is coexpressed with Olig2 in neural progenitors, and has a role in the development and maturation of oligodendrocytes. OLIG1 gene promotes formation and maturation of oligodendrocytes, especially within the brain. It cooperates with OLIG2 to establish the pMN domain of the embryonic neural tube.

Images



Anti- OLIG1 antibody, ABO11523, Western blotting
lanes: Anti OLIG1 (ABO11523) at 0.5ug/ml
Lane 1: U87 Whole Cell Lysate at 40ug
Lane 2: HELA Whole Cell Lysate at 40ug
Predicted bind size: 28KD
Observed bind size: 28KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.