



Rabbit Anti-OLIG1 antibody

SL8548R

Product Name:	OLIG1
Chinese Name:	少突胶质细胞转录因子1
Alias:	Oligo 1; Oligo1; Oligodendrocyte lineage transcription factor 1; Oligodendrocyte specific bHLH transcription factor 1; Oligodendrocyte transcription factor 1. Basic domain helix loop helix protein class B 6; Basic domain helix loop helix protein class B6; BHLH B6; BHLHB 6; BHLHB6; bHLHe21; Class B basic helix-loop-helix protein 6; Class E basic helix-loop-helix protein 21; Olig 1; Olig1; OLIG1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	28kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human OLIG1:121-220/271
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The oligodendrocyte lineage-specific basic helix-loop-helix (OLIG) family of transcription factors include OLIG1-OLIG3, which differ in tissue expression. OLIG1 and OLIG2 are specifically expressed in nervous tissue as gene regulators of

oligodendrogenesis. OLIG2 is more widely expressed in embryonic brain than OLIG1, while OLIG3 is primarily expressed in non-neural tissues. OLIG1 and OLIG2 interact with the Nkx-2.2 homeodomain protein, which is responsible for directing ventral neuronal patterning in response to graded Sonic hedgehog signaling in the embryonic neural tube. These interactions between OLIG proteins and Nkx-2.2 appear to promote the formation of alternate cell types by inhibiting V3 interneuron development. OLIG1 and OLIG2 are abundantly expressed in oligodendroglioma and nearly absent in astrocytomas. Therefore, OLIG proteins are candidates for molecular markers of human glial brain tumors, which are the most common primary malignancies of the human brain.

Function:

Promotes formation and maturation of oligodendrocytes, especially within the brain. Cooperates with OLIG2 to establish the pMN domain of the embryonic neural tube (By similarity).

Subcellular Location:

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.

Similarity:

Contains 1 bHLH (basic helix-loop-helix) domain.

SWISS:

Q8TAK6

Gene ID:

116448

Database links:

[Entrez Gene: 116448](#) Human

[Entrez Gene: 50914](#) Mouse

[Entrez Gene: 60394](#) Rat

[Omim: 606385](#) Human

[SwissProt: Q8TAK6](#) Human

[SwissProt: Q9JKN5](#) Mouse

[SwissProt: Q9WUQ3](#) Rat

[Unigene: 56663](#) Human

[Unigene: 39300](#) Mouse

[Unigene: 45339](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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