

# Anti-Olig1 Antibody

Catalog # ABO11523

### Specification

## Anti-Olig1 Antibody - Product Information

ApplicationWBPrimary AccessionQ8TAK6HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Oligodendrocyte transcription factor 1(OLIG1) detection. Testedwith WB in Human.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-Olig1 Antibody - 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 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human<br>

**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. .

**Protein Name** Oligodendrocyte transcription factor 1

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Olig1(94-109aa ARPDAKEEQQQQLRRK), 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.

### Anti-Olig1 Antibody - Protein Information

Name OLIG1

Synonyms BHLHB6, BHLHE21

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).

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.

#### Anti-Olig1 Antibody - 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>

Anti-Olig1 Antibody - Images





Anti- OLIG1 antibody, ABO11523, Western blottingAll lanes: Anti OLIG1 (ABO11523) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugPredicted bind size: 28KDObserved bind size: 28KD

#### Anti-Olig1 Antibody - 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.