

Rabbit Olig1 Polyclonal Antibody | anti-OLIG1 antibody

Anti-Olig1 Antibody

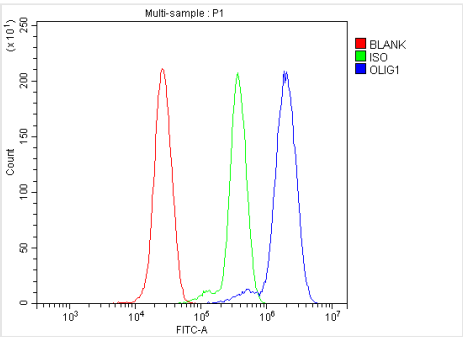
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125768	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

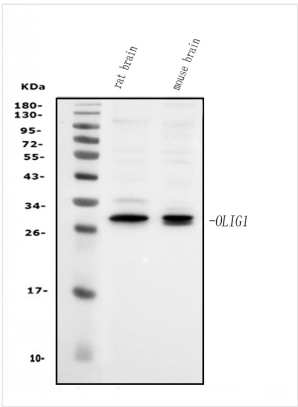
Olig1; Polyclonal Antibody; Anti-Olig1 Antibody; OLIG1; BHLHB6; BHLHE21; Oligodendrocyte transcription factor 1; Oligo1; Class B basic helix-loop-helix protein 6; bHLHB6; Class E basic helix-loop-helix protein 21; bHLHe21; oligodendrocyte transcription factor 1; anti-OLIG1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Olig1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-OLIG1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human Olig1 recombinant protein (Position: M1-K271).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of THP-1 cells using anti-Olig1 antibody (AAA125768).Overlay histogram showing THP-1 cells stained with AAA125768 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Olig1 Antibody (AAA125768, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of Olig1 using anti-Olig1 antibody (AAA125768).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat brain tissue lysatesLane 2: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Olig1 antigen affinity purified polyclonal antibody (Catalog # AAA125768) at 0.5 μg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Olig1 at approximately 28KD. The expected band size for Olig1 is at 28KD.

ADDITIONAL INFORMATION

Related Product Information for anti-OLIG1 antibody	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.
References	1. Arnett, H. A., Fancy, S. P. J., Alberta, J. A., Zhao, C., Plant, S. R., Kaing, S., Raine, C. S., Rowitch, D. H., Franklin, R. J. M., Stiles, C. D. bHLH transcription factor Olig1 is required to repair demyelinated lesions in the CNS. Science 306: 2111-2115, 2004. 2. Lu, Q. R., Sun, T., Zhu, Z., Ma, N., Garcia, M., Stiles, C. D., Rowitch, D. H. Common developmental requirement for Olig function indicates a motor neuron/oligodendrocyte connection. Cell 109: 75-86, 2002. 3. Zhou, Q., Anderson, D. J. The bHLH transcription factors OLIG2 and OLIG1 couple neuronal and glial subtype specification. Cell 109: 61-73, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	237757328
NCBI GeneID	116448
NCBI Accession #	NP_620450
NCBI GenBank Nucleotide #	NM_138983.2
UniProt Accession #	Q8TAK6; Q7RTS0
Molecular Weight	Predicted: 30 kDa Observed: 29 kDa
NCBI Official Full Name	oligodendrocyte transcription factor 1
NCBI Official Synonym Full Names	oligodendrocyte transcription factor 1

NCBI Official Symbol	OLIG1
NCBI Official Synonym Symbols	BHLHB6; BHLHE21
NCBI Protein Information	oligodendrocyte transcription factor 1; oligo1; class B basic helix-loop-helix protein 6; class E basic helix-loop-helix protein 21; oligodendrocyte lineage transcription factor 1; basic domain, helix-loop-helix protein, class B, 6; oligodendrocyte-specif
UniProt Protein Name	Oligodendrocyte transcription factor 1
UniProt Gene Name	OLIG1
UniProt Synonym Gene Names	BHLHB6; BHLHE21; Oligo1; bHLHb6; bHLHe21
UniProt Entry Name	OLIG1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/olig1-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125768>