

Basic Information

Product Name	Anti-OLIG1 Antibody	
Gene Name	OLIG1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Olig1 recombinant protein (Position: M1-K271).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	28 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

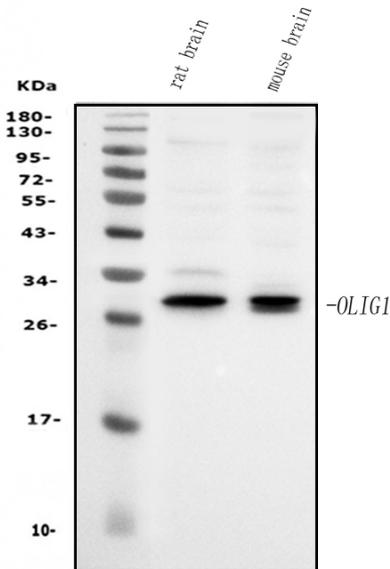
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data

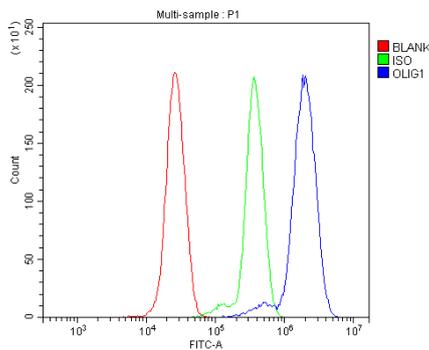


Western blot analysis of OLIG1 using anti-OLIG1 antibody (A06108-3). The sample well of each lane was loaded with 30 μ g of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-OLIG1 antigen affinity purified polyclonal antibody (A06108-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for OLIG1 at approximately 28 kDa. The expected band size for OLIG1 is at 28 kDa.



Flow Cytometry analysis of THP-1 cells using anti-OLIG1 antibody (A06108-3).

Overlay histogram showing THP-1 cells stained with A06108-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OLIG1 Antibody (A06108-3) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.