

**OLIG2 (PT0276R) rabbit mAb**

<b>Catalog No :</b>	YM7178
<b>Reactivity :</b>	Human;(predicted: Mouse)
<b>Applications :</b>	WB; ELISA
<b>Target :</b>	OLIG2
<b>Gene Name :</b>	OLIG2
<b>Human Gene Id :</b>	10215
<b>Human Swiss Prot No :</b>	Q13516
<b>Mouse Swiss Prot No :</b>	Q9EQW6
<b>Immunogen :</b>	Synthesized peptide derived from human OLIG2. AA range:1-100
<b>Specificity :</b>	This antibody detects endogenous levels of OLIG2
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal, Rabbit IgG1, Kappa
<b>Dilution :</b>	WB 1:500-1000, ELISA 1:5000-20000
<b>Purification :</b>	Recombinant Expression and Affinity purified
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	32kD
<b>Background :</b>	This gene encodes a basic helix-loop-helix transcription factor which is expressed in oligodendroglial tumors of the brain. The protein is an essential regulator of ventral neuroectodermal progenitor cell fate. The gene is involved in a chromosomal translocation t(14;21)(q11.2;q22) associated with T-cell acute lymphoblastic leukemia. Its chromosomal location is within a region of chromosome 21 which has been suggested to play a role in learning deficits

associated with Down syndrome. [provided by RefSeq, Jul 2008],

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**Function :**

disease:A chromosomal aberration involving OLIG2 may be a cause of a form of T-cell acute lymphoblastic leukemia (T-ALL). Translocation t(14;21)(q11.2;q22) with TCRA.,domain:The bHLH is essential for interaction with NKX2-2.,function:Required for oligodendrocyte and motor neuron specification in the spinal cord, as well as for the development of somatic motor neurons in the hindbrain. Cooperates with OLIG1 to establish the pMN domain of the embryonic neural tube. Antagonist of V2 interneuron and of NKX2-2-induced V3 interneuron development.,induction:By SHH. Also induced by NKX6-1 in the developing spinal cord, but not in the rostral hindbrain.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subcellular location:The NLS contained in the bHLH domain could be masked in the native form and translocation to the nucleus could be mediated by interaction either with class E bHLH par

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**Subcellular Location :**

Nucleus . Cytoplasm . The NLS contained in the bHLH domain could be masked in the native form and translocation to the nucleus could be mediated by interaction either with class E bHLH partner protein or with NKX2-2. .

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**Expression :**

Expressed in the brain, in oligodendrocytes. Strongly expressed in oligodendrogliomas, while expression is weak to moderate in astrocytomas. Expression in glioblastomas highly variable.

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