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Olig2 Antibody

Rabbit mAb
Catalog # AP90158

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	Q13516
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Oligo2; bHLHb1; Class E basic helix-loop-helix protein 19; bHLHe19; OLIG2; BHLHB1; BHLHE19; PRKC;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	32385

Additional Information

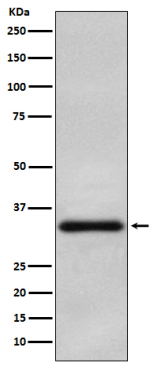
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Olig2
Description	Olig2 is required for oligodendrocyte and motor neuron specification in the spinal cord, as well as for the development of somatic motor 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	OLIG2
Synonyms	BHLHB1, BHLHE19, PRKCBP2, RACK17
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. Works in coordination with ZNF488 to promote oligodendrocyte differentiation. Orchestrates progenitor cell fates during cortical gliogenesis and gliomagenesis. In cooperation with OLIG2, activates oligodendrocyte precursor cells (OPCs) formation while repressing the generation of olfactory bulb interneuron intermediate progenitors (OBIN) generation through transcriptional regulation of GSX2. Mechanistically, binds and silences multiple conserved enhancer elements of GSX2. 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.

Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}. Cytoplasm. Note=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.
Tissue Location	Expressed in the brain, in oligodendrocytes. Strongly expressed in oligodendrogliomas, while expression is weak to moderate in astrocytomas. Expression in glioblastomas highly variable

Images



Western blot analysis of Olig2 in Human oligodendroglioma lysate.

Image not found : 202311/AP90158-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human mouse brain, using Olig2 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.