

36-2019: Anti-OLIG2 (Marker of Glial Brain Tumors) Monoclonal Antibody (Clone: OLIG2/2400)

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| Clonality : | Monoclonal |
| Clone Name : | OLIG2/2400 |
| Application : | IHC |
| Reactivity : | Human |
| Gene : | OLIG2 |
| Gene ID : | 10215 |
| Uniprot ID : | Q13516 |
| Alternative Name : | Basic helix loop helix protein class B1 (bHLHB1); basic helix-loop-helix protein 19 (bHLHe19); OLIG2; Oligodendrocyte lineage transcription factor 2; Oligodendrocyte specific bHLH transcription factor 2; Oligodendrocyte transcription factor 2; Protein kinase C-binding protein 2 (PRKCBP2); RACK17 |
| Isotype : | Mouse IgG1, kappa |
| Immunogen Information : | Recombinant fragment of human OLIG2 protein (around aa 1-141) (exact sequence is proprietary) |

Description

Olig2, a basic helix-loop-helix transcription factor, is involved in oligodendroglial specification. Olig2 expression has been reported in most glial tumors, such as oligodendrogliomas and astrocytomas. Although more than half of glioblastomas are positive for Olig2, expression is very weak in terms of both percentage of labeled cells and intensity. No Olig2 expression has been found in the non-glial tumors including neuro-epithelial tumors, ependymomas, sub-ependymomas, medulloblastomas, and non-neuroepithelial tumors, such as CNS lymphomas, meningiomas, schwannomas, atypical teratoid / rhabdoid tumor, and haemangioblastomas. Compared to the strong staining seen in glioma samples, a weak expression is observed in non-tumoral brain tissue (gliosis).

Product Info

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| Amount : | 20 µg / 100 µg |
| Content : | 200µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| Storage condition : | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. |

Application Note

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

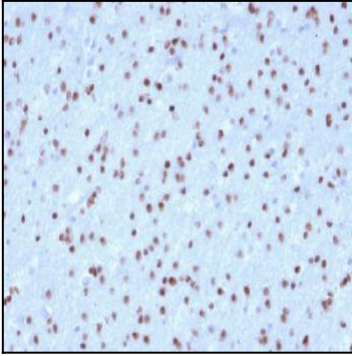


Fig.1: Formalin-fixed, paraffin-embedded human Cerebellum stained with OLIG2 Mouse Monoclonal Antibody (OLIG2/2400).

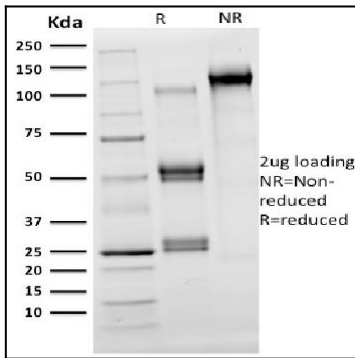


Fig. 2: SDS-PAGE Analysis Purified OLIG2 Mouse Monoclonal Antibody (OLIG2/2400). Confirmation of Integrity and Purity of Antibody.

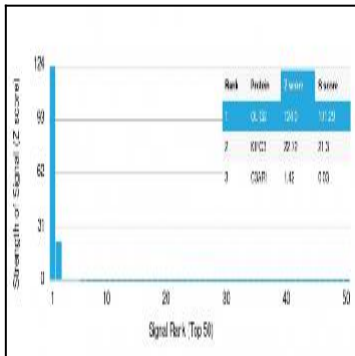


Fig. 3: Analysis of Protein Array containing >19,000 full-length human proteins using OLIG2 Mouse Monoclonal Antibody (OLIG2/2400) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to be specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.