

Supplementary Table S1. FISH and immunohistochemistry results in 19 gliomas (grades I-IV) and 12 ependymomas. NA: not available; 0: negative; 1+: scattered staining pattern; 2+: strong and uniform staining pattern.

Case no.	Sex	Age (years)	Histology	WHO grade	ALK FISH	pSTAT3 IHC	ALK IHC	Olig2 IHC
G1	M	15	Pilocytic astrocytoma	I	0	2+	1+	NA
G2	F	6	Subependymal giant cell astrocytoma	I	0	NA	NA	NA
G3	M	12	Pilocytic astrocytoma	I	0	NA	NA	NA
G4	M	8	Pilocytic astrocytoma	I	0	0	1+	NA
G5	M	12	Pilocytic astrocytoma	I	0	0	1+	NA
G6	F	5	Low-grade glioma	II	0	NA	NA	NA
G7	F	8	Low-grade astrocytoma	II	NA	0	1+	NA
G8	M	7	Low-grade astrocytoma	II	0	0	0	NA
G9	M	15	Low-grade neuroepithelial tumor	II	0	NA	NA	NA
G10	M	30	Low-grade astrocytoma	II	0	0	0	NA
G11	F	27	Anaplastic astrocytoma	III	NA	1+	0	NA
G12	M	28	Anaplastic astrocytoma	III	0	1+	0	NA
G13	M	29	Anaplastic astrocytoma	III	0	0	1+	NA
G14	M	29	Anaplastic astrocytoma	III	0	0	0	NA
G15	F	15	Glioblastoma	IV	0	NA	NA	NA
G16	M	20	Glioblastoma	IV	0	0	0	NA
G17	M	18	Giant cell glioblastoma	IV	0	NA	NA	NA
G18	M	30	Glioblastoma	IV	0	1+	0	NA
G19	M	32	Glioblastoma	IV	0	0	1+	NA
1	M	0.8	Ependymoma	II or III	positive	2+	2+ (positive)	0
2	F	0.9	Anaplastic ependymoma/Glioblastoma	IV	positive	2+	2+ (positive)	0
3	F	47	Ependymoma	II	NA	NA	NA	NA
4	M	53	Ependymoma	II	0	1+	0	NA
5	M	61	Subependymoma	I	0	0	0	NA
6a	M	38	Anaplastic ependymoma, giant cell type	III	0	2+	0	NA
6b	M	38	Anaplastic ependymoma	III	NA	NA	NA	NA
7	M	75	Subependymoma	I	0	1+	1+	NA
8	M	42	Anaplastic ependymoma	III	0	1+	0	NA
9	F	46	Subependymoma	I	NA	0	0	NA
10	F	46	Ependymoma	II	0	1+	0	NA
11	F	1	Anaplastic ependymoma	III	0	1+	0	NA