

## Erratum to: Development of a robust and sensitive pyrosequencing assay for the detection of *IDH1/2* mutations in gliomas

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In original publication of article, the pyrosequencing assay for IDH2 in Table 1 was incorrectly described as follows:

Sequence to analyze: ANGCAC.

Dispensation order: TATGTCACGCAC.

The correct assay is as follows:

Sequence to analyze: ANGCACGCCCAT.

Dispensation order: GTACTGTCACGC.

The corrected version of Table 1 is given in this erratum.

In addition, the authors would like to include the below comment with this erratum.

Another point which we would like to comment on is about R172S mutation, an extremely rare mutation in IDH2 for gliomas. Two types of single nucleotide change have been reported as an R172S mutation (c.516G>C and c.516G>T) [1, 2]. In the present study, we validated the assay for IDH2 using a plasmid generated from a clinical case with c.516G>T transition (Fig. 1). Theoretically, the other R172S mutation (c.516G>C) would also be detected by increased peaks at the 6th (G) and 8th (C) dispensations. This type of mutation is extremely rare in gliomas, and our assays are still useful in detecting either mutation.

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**Table 1** Sequences of the primers for PCR for pyrosequencing, Sanger sequencing, and the pyrosequencing assays

Procedure	Sequence
PCR for pyrosequencing	
For IDH1 (product length: 86 bp)	
Forward primer (PC6041)	CAAAAATATCCCCGGCTTG
Reverse primer (PC6042)	bio-CAACATGACTTACTTGATCCCC
For IDH2 (product length: 85 bp)	
Forward primer (PC6099)	ACATCCCACGCCTAGTCCC
Reverse primer (PC6100)	bio-TCTCCACCCTGGCCTACCTG
Pyrosequencing	
For IDH1	
Primer (P0125)	ACCTATCATCATAGGT
Sequence to analyze	CDTCATGCTTAT
Dispensation order	GATCATGTGATG
Assay type	AQ assay
For IDH2	
Primer (P0126)	CCCATCACCATTGGC
Sequence to analyze	ANGCACGCCAT
Dispensation order	GTACTGTACGCG
Assay type	AQ assay
Sanger sequencing [8]	
For IDH1 (product length: 254 bp)	
Forward primer (IDH1 fc)	ACCAAATGGCACCATACGA
Reverse primer (IDH1 rc)	TTCATACCTTGCTTAATGGGTGT
For IDH2 (product length: 293 bp)	
Forward primer (IDH2 fc)	GCTGCAGTGGGACCACTATT
Reverse primer (IDH2 rc)	TGTGGCCTTGACTGCAGAG

## References

1. Horbinski C (2013) What do we know about IDH1/2 mutations so far, and how do we use it? *Acta Neuropathol (Berl)* 125:621–636
2. Sonoda Y, Kumabe T, Nakamura T, Saito R, Kanamori M, Yamashita Y, Suzuki H, Tominaga T (2009) Analysis of IDH1 and IDH2 mutations in Japanese glioma patients. *Cancer Sci* 100:1996–1998