





# **Methylation profiling report**

# General information

Sentrix ID: 202273260022\_R08C01

Array type: EPIC

Material type: KRYO DNA

Gender: male

#### Brain tumor methylation classifier results (v11b4)

Methylation classes (MCs with score >= 0.3)	Calibrated score	Interpretati	ion
methylation class family Glioblastoma, IDH wildtype	0.94	match	<b>~</b>
MC family members with score >= 0.1			
methylation class glioblastoma, IDH wildtype, subclass RTK II	0.45		
methylation class glioblastoma, IDH wildtype, subclass RTK I	0.44		
Legend: ✓ Match (score >= 0.9) X No match (score < 0.9): possibly still relevant for low tumor quality cases.	content and low DNA • Match to (score >=		nber

#### Class descriptions

**Methylation class family Glioblastoma, IDH wildtype:** The methylation class family "Glioblastoma, IDH wildtype" comprises the methylation classes glioblastoma, IDH wildtype, subtype RTK I to III, glioblastoma, IDH wildtype, subtype mesenchymal, glioblastoma, IDH wildtype, subtype MYCN and glioblastoma, IDH wildtype, subtype midline.

Methylation class glioblastoma, IDH wildtype, subclass RTK II: The methylation class "glioblastoma, IDH wildtype, subclass RTK II" is comprised of tumors with a histological diagnosis of glioblastoma, IDH wildtype and rarely gliosarcoma, IDH wildtype. These tumors are typically located in the cerebral hemispheres. Median age is 61 years (range 36 to 86). Recurrent chromosomal alterations are gain of chromosome 7 with or without EGFR amplification (>90%), loss of 9p21 (CDKN2A/B; >70%) and chromosome 10 loss (>90%). Gin of chromosome 19 and 20 is also recurrently observed (40% of cases). Expression profiles often resemble the 'Classical' subgroup according to the TCGA classification.

Methylation class glioblastoma, IDH wildtype, subclass RTK I: The methylation class "glioblastoma, IDH wildtype, subclass RTK I" is comprised of tumors with a histological diagnosis of glioblastoma, IDH wildtype. The tumors are located in the cerebral hemispheres. Median age is 64 years (range 29 to 84). Recurrent chromosomal alterations are gain of chromosome 7 with or without EGFR amplification (>80%), loss of 9p21 (CDKN2A/B; >50%) and chromosome 10 loss (>70%). Amplifications of the PDGFRA oncogene are enriched in this class (present in 20-30% of cases). Expression profiles often resemble the 'Proneural' subgroup according to the TCGA classification.

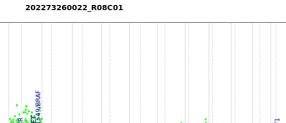
### Copy number variation profile

0.8

0.4

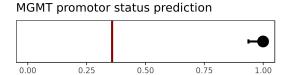
-0.8

-1.2



Depiction of chromosome 1 to 22 (and X/Y if automatic prediction was successful). Gains/amplifications represent positive, losses negative deviations from the baseline. 29 brain tumor relevant gene regions are highlighted for easier assessment. (see Hovestadt & Zapatka, <a href="http://www.bioconductor.org/packages/devel/bioc/html/conumee.html">http://www.bioconductor.org/packages/devel/bioc/html/conumee.html</a>)

## **MGMT promotor methylation (MGMT-STP27)**



Score (red line cutoff=0.3582)

StatusEstimatedCI lowerCI uppermethylated0.999430.937291.0

(see Bady et al, J Mol Diagn 2016; 18(3):350-61)

#### **Disclaimer**

Classification using methylation profiling is a research tool under development, it is not verified and has not been clinically validated. Implementation of the results in a clinical setting is in the sole responsibility of the treating physician. Intended for non-commercial use only.

#### **Run information**

Report: idat\_reportBrain\_v11b4 Version 2.0 Task version:

Task	Version
idat_qc	2.0
idat_predictBrain	2.1
idat_rs_gender	2.0
idat_predictMGMT	2.0
idat_cnvp	3.0