

# Methylation profiling report

## Supplier information

Sample identifier:	sampleName1527692155	Automatic prediction		
Sentrix ID:	202047860190_R01C01	Array type:	EPIC	
Material type:	FFPE DNA	Material type:	KRYO DNA	✗
Gender:	NA	Gender:	male	!
Supplier diagnosis:	-	Legend: ✓ OK   ! Supplier information or prediction not available   ✗ Warning, mismatch of prediction and supplier information		

## Brain tumor methylation classifier results (v11b4)

Methylation classes (MCs with score >= 0.3)	Calibrated score	Interpretation
methylation class family Glioblastoma, IDH wildtype	0.75	no match ✗
MC family members with score >= 0.1		
methylation class glioblastoma, IDH wildtype, subclass RTK I	0.46	
methylation class glioblastoma, IDH wildtype, subclass midline	0.28	

Legend: ✓ Match (score >= 0.9) ✗ No match (score < 0.9): possibly still relevant for low tumor content and low DNA quality cases. ● Match to MC family member (score >= 0.5)

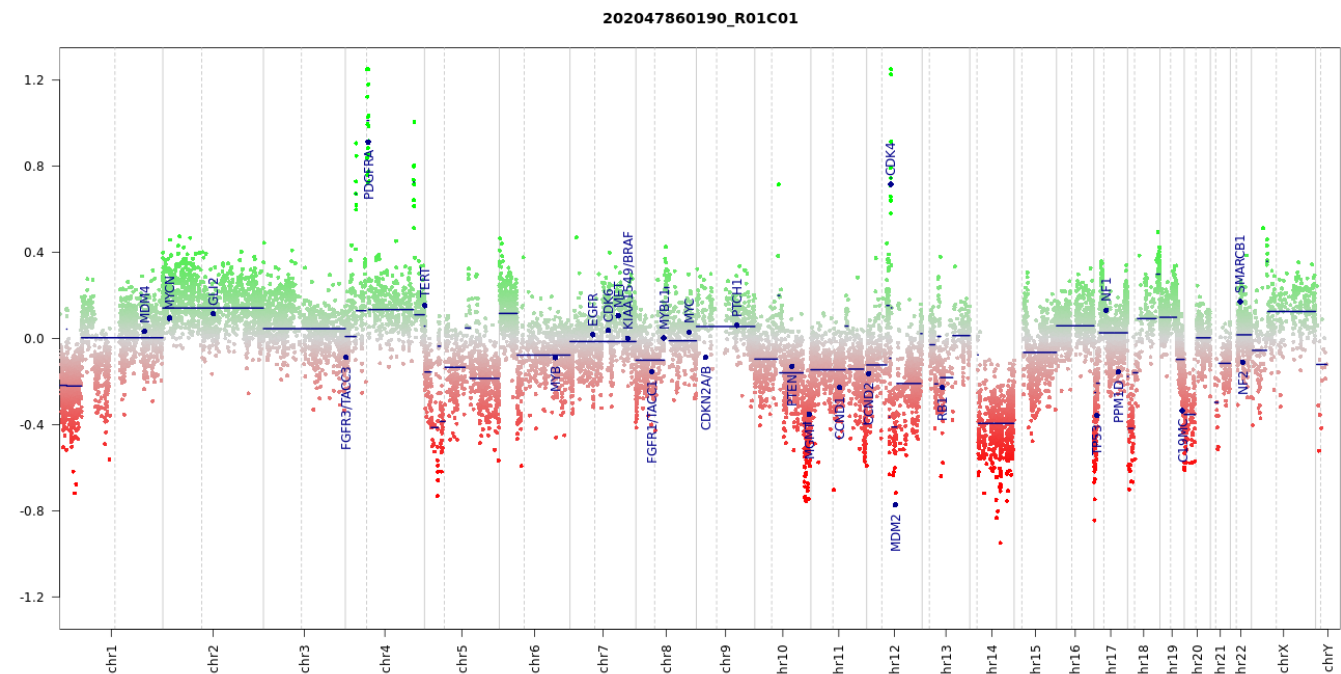
## Class descriptions

**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 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.

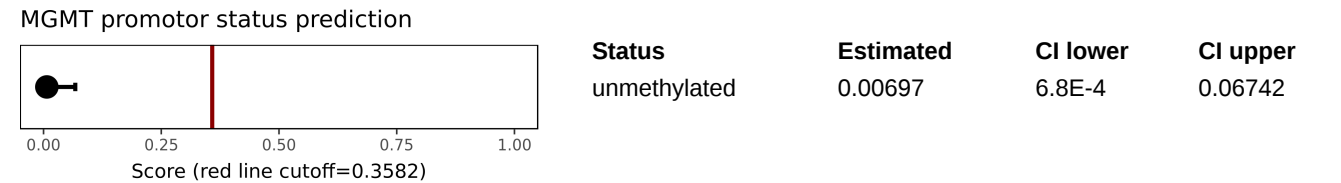
**Methylation class glioblastoma, IDH wildtype, subclass midline:** The methylation class "glioblastoma, IDH wildtype, subclass midline" is comprised of tumors with a histological diagnosis of glioblastoma, located in midline structures (thalamus, cerebellum, spine). Median age is 13 years (range 2 to 79). Tumors of this class share epigenetic similarities with histone 3 K27M-mutated tumors, but lack this mutation. Mutations of FGFR1 are relatively common, particularly in thalamic tumors. Copy number changes are numerous, the most frequent changes being gain/amplification of PDGFR-alpha and loss of CDKN2A/B (both in over 70% of cases).

Copy number variation profile



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, <http://www.bioconductor.org/packages/devel/bioc/html/conumee.html>)

MGMT promotor methylation (MGMT-STP27)



(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\_sample 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
idat_reportBrain_v11b4	2.0