

Supplementary Data

Supplementary Data 1. EpiDiP classification reports for the 31 crossNN head to head samples. Individual EpiDiP web portal reports for the 31 array samples from GSE289137 used in the head-to-head comparison with MAGIBU ([Supplementary Table 3](#)). For each sample the report shows the methylation UMAP positioning of the case relative to the EpiDiP reference landscape and the corresponding genome wide copy number profile; samples are ordered as in [Supplementary Table 3](#).



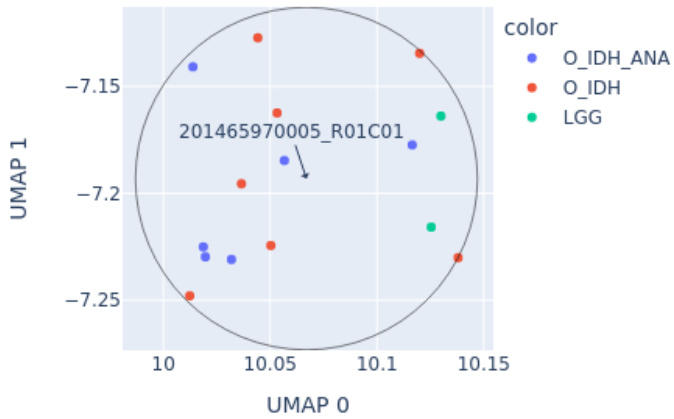
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450K overlap CpG count	: 0
Reference data	: AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

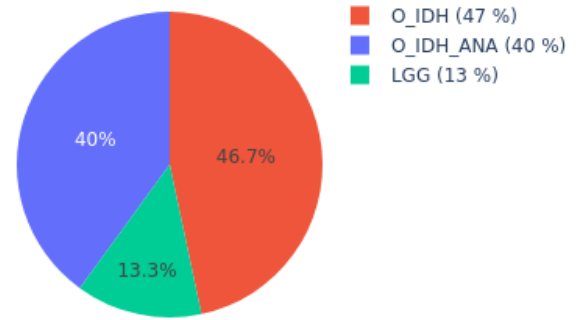
Close-up of UMAP for 201465970005_R01C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



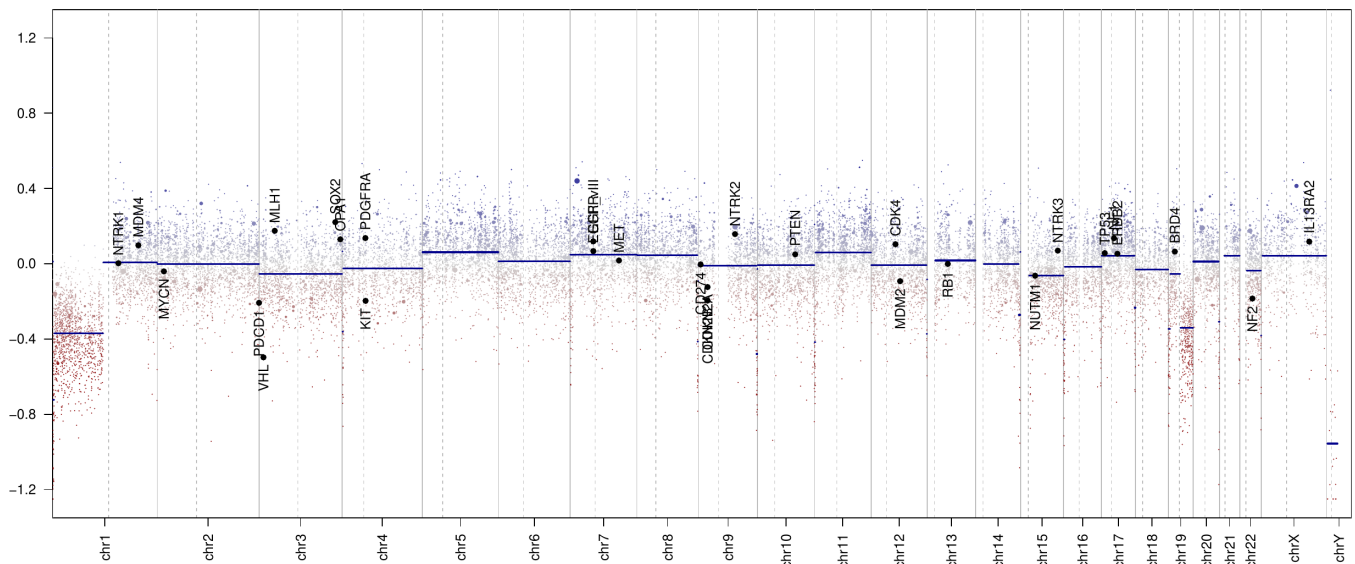
Neighbors in UMAP for 201465970005_R01C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

201465970005_R01C01





EpiDiP Report for Sample 202995850067_R07C01

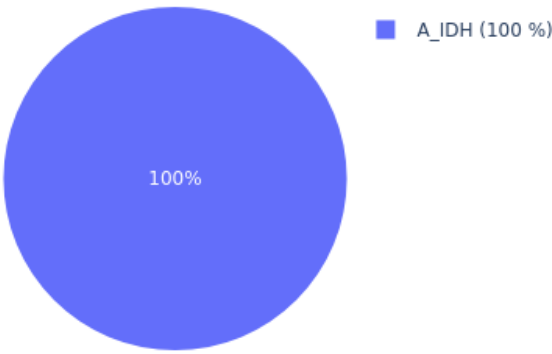
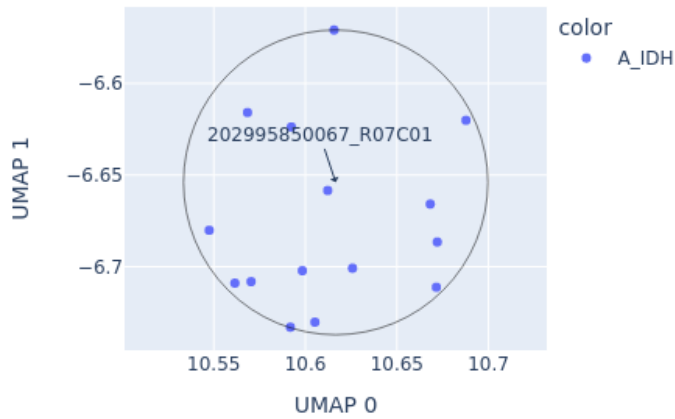
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Methylation UMAP plot

Methylation UMAP Score

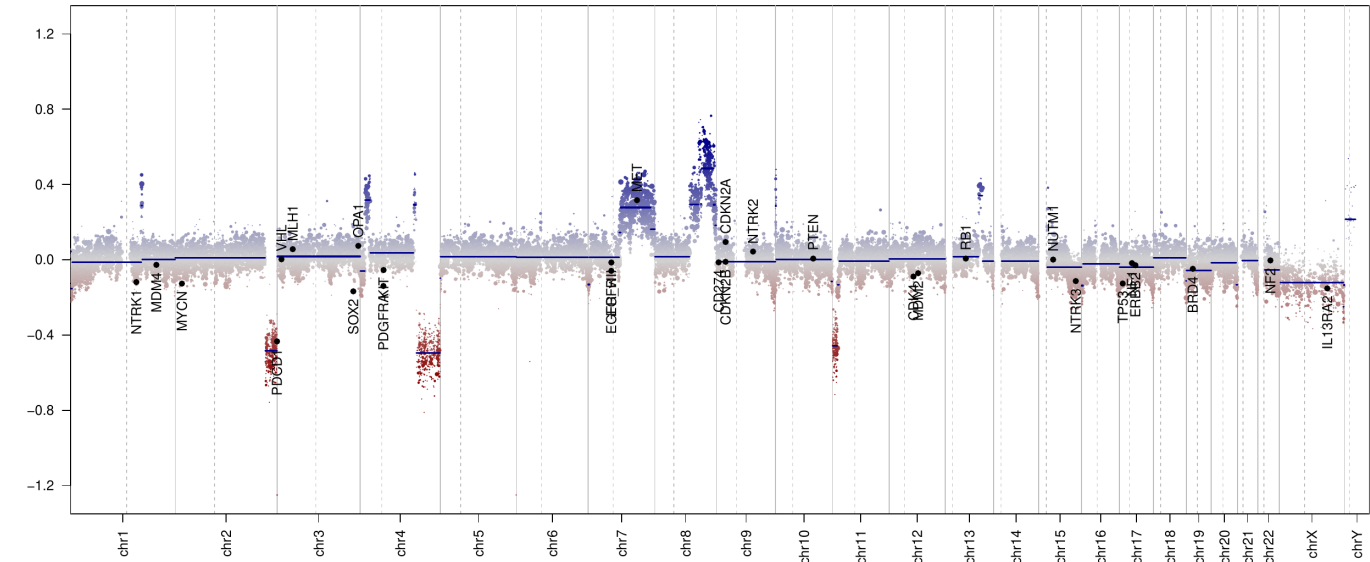
Close-up of UMAP for 202995850067_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 202995850067_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

202995850067_R07C01





EpiDiP Report for Sample 203013220103_R07C01

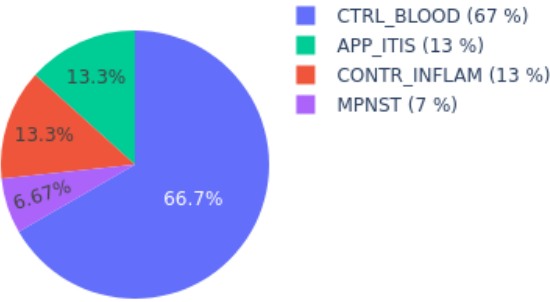
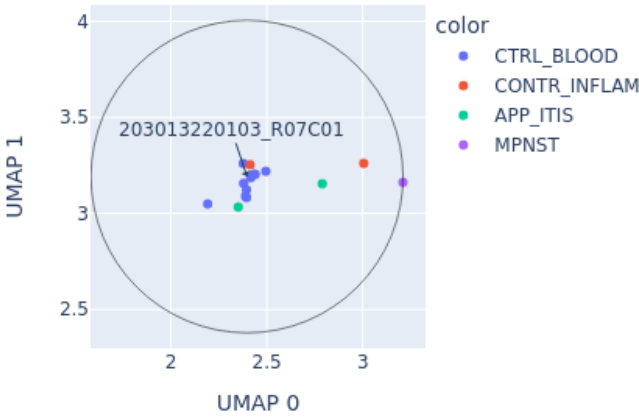
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

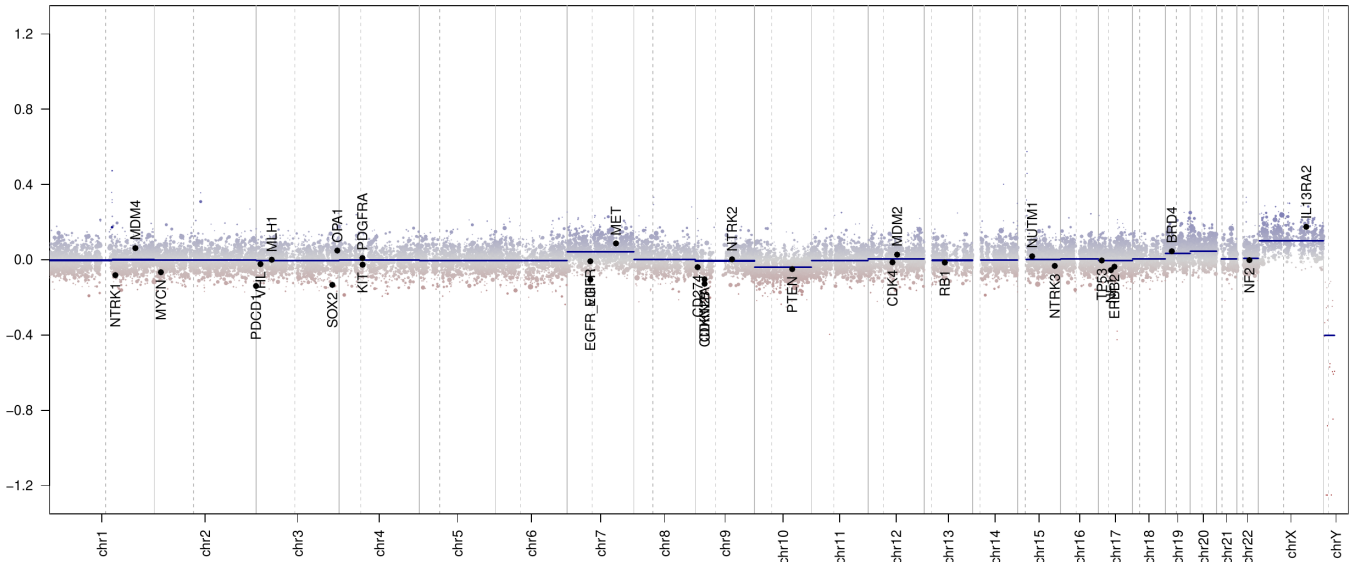
Close-up of UMAP for 203013220103_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 203013220103_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

203013220103_R07C01





EpiDiP Report for Sample 203017150041_R02C01

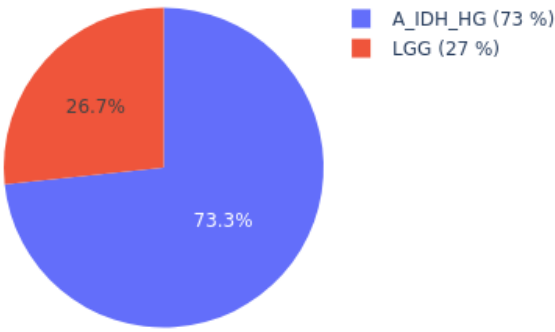
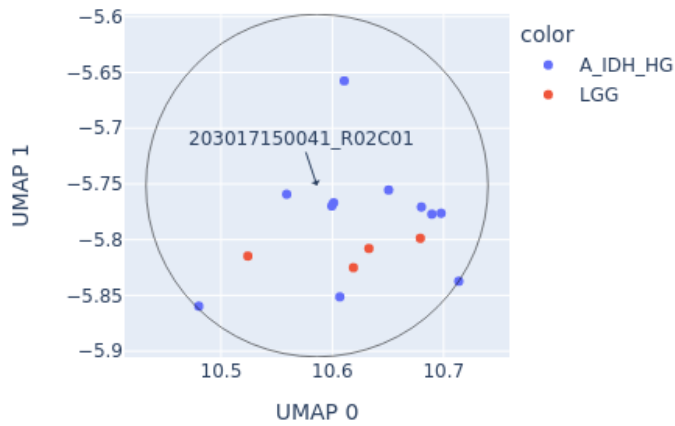
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

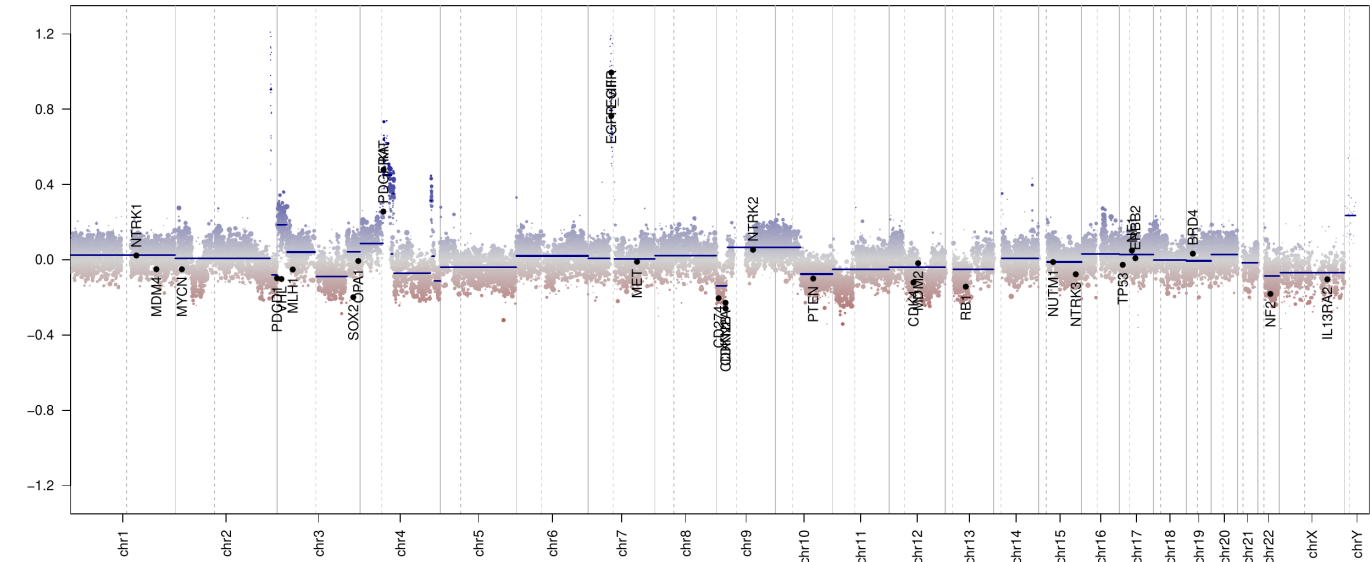
Close-up of UMAP for 203017150041_R02C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 203017150041_R02C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

203017150041_R02C01





EpiDiP Report for Sample 203810690044_R07C01

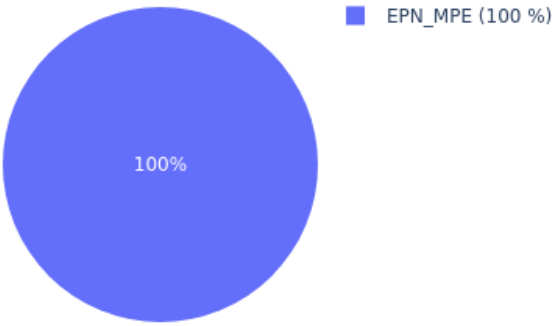
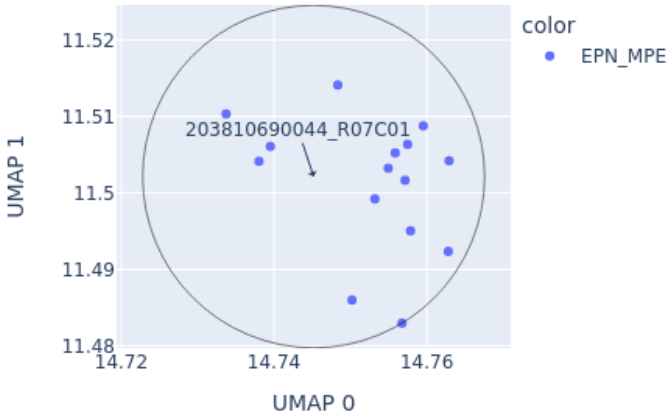
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450K overlap CpG count : 0
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Methylation UMAP plot

Methylation UMAP Score

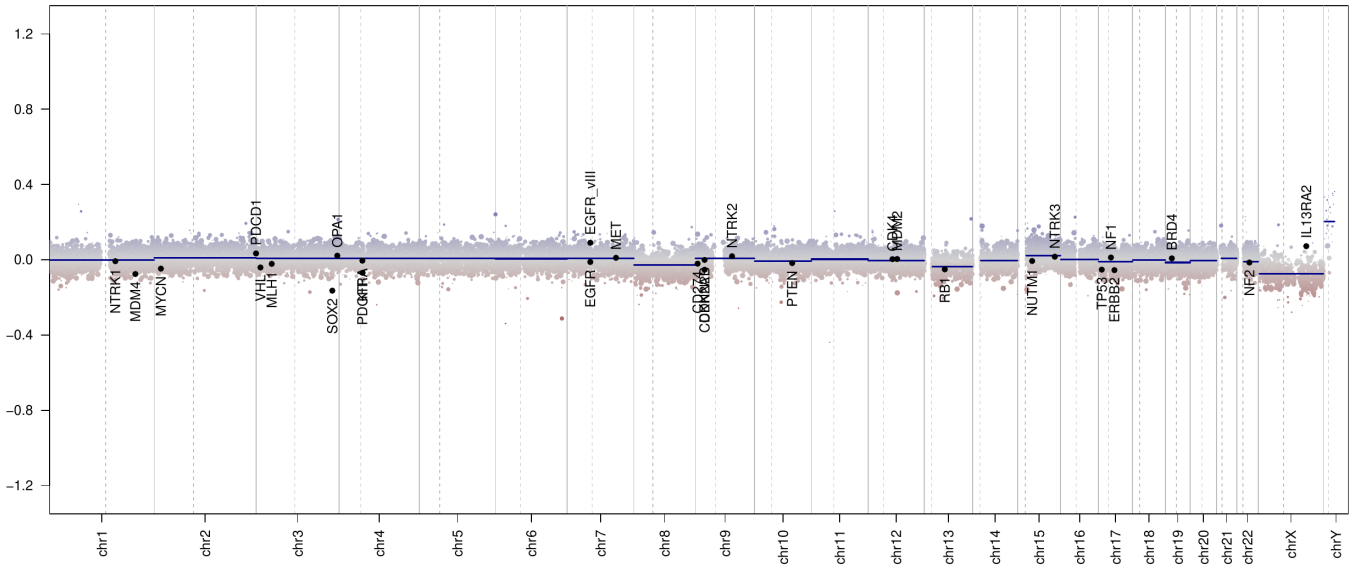
Close-up of UMAP for 203810690044_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 203810690044_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

203810690044_R07C01





EpiDiP Report for Sample 203821710008_R04C01

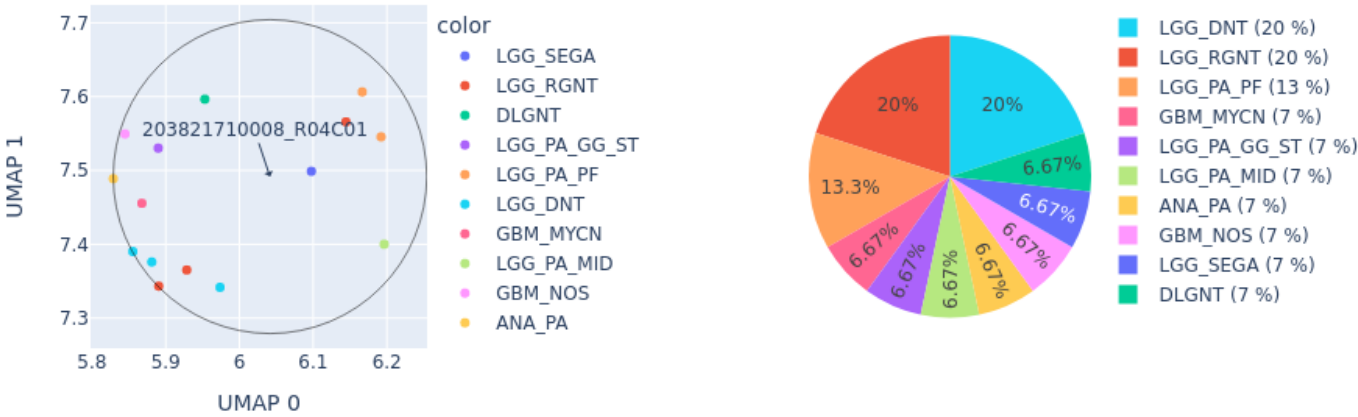
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

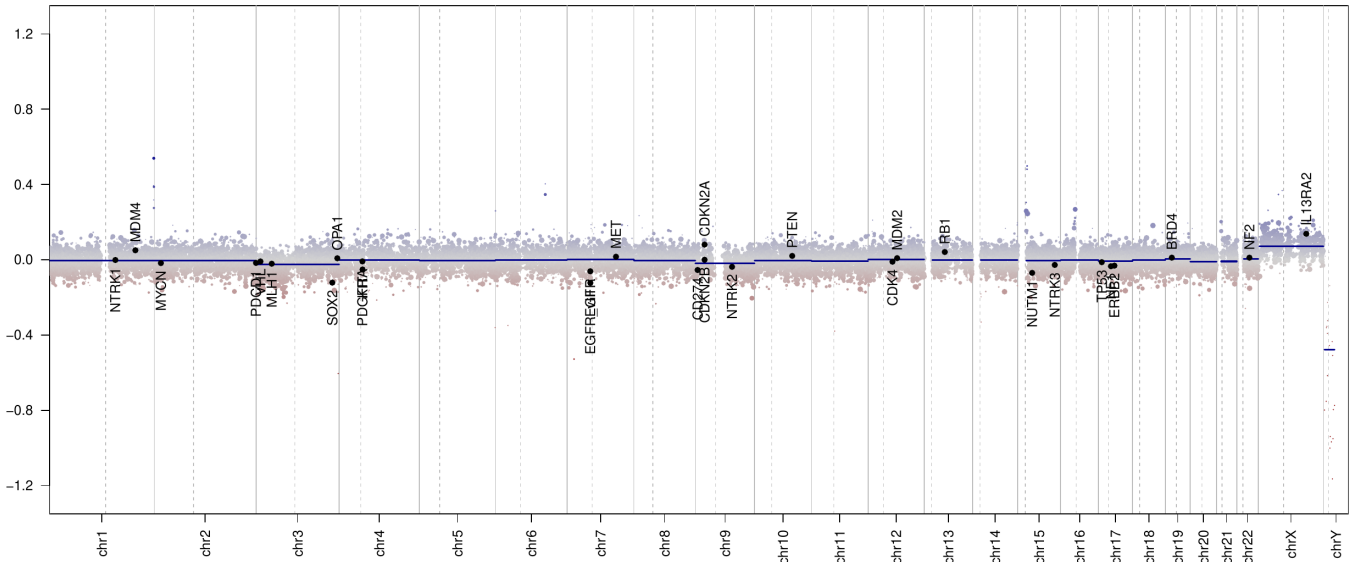
Close-up of UMAP for 203821710008_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 203821710008_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

203821710008_R04C01





EpiDiP Report for Sample 204425700133_R04C01

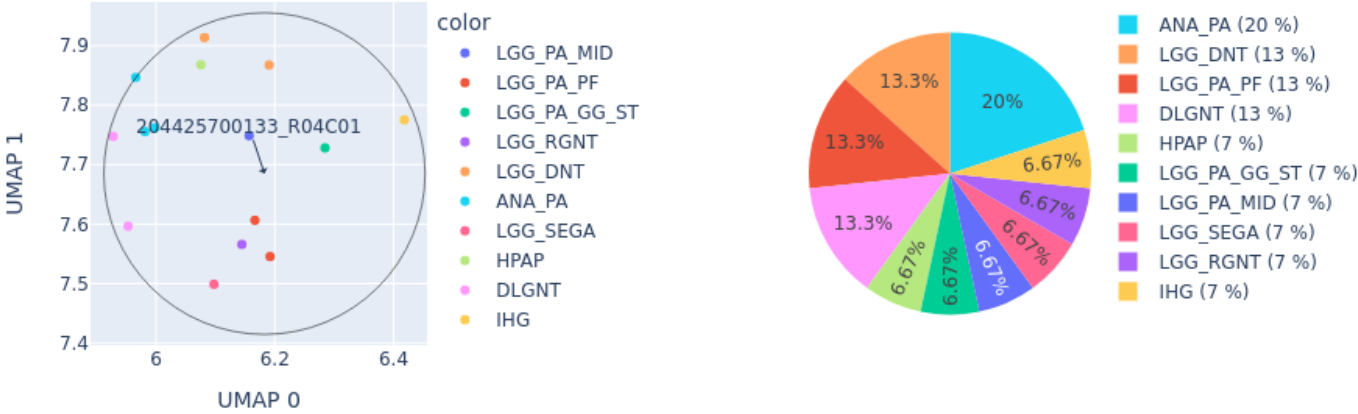
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Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

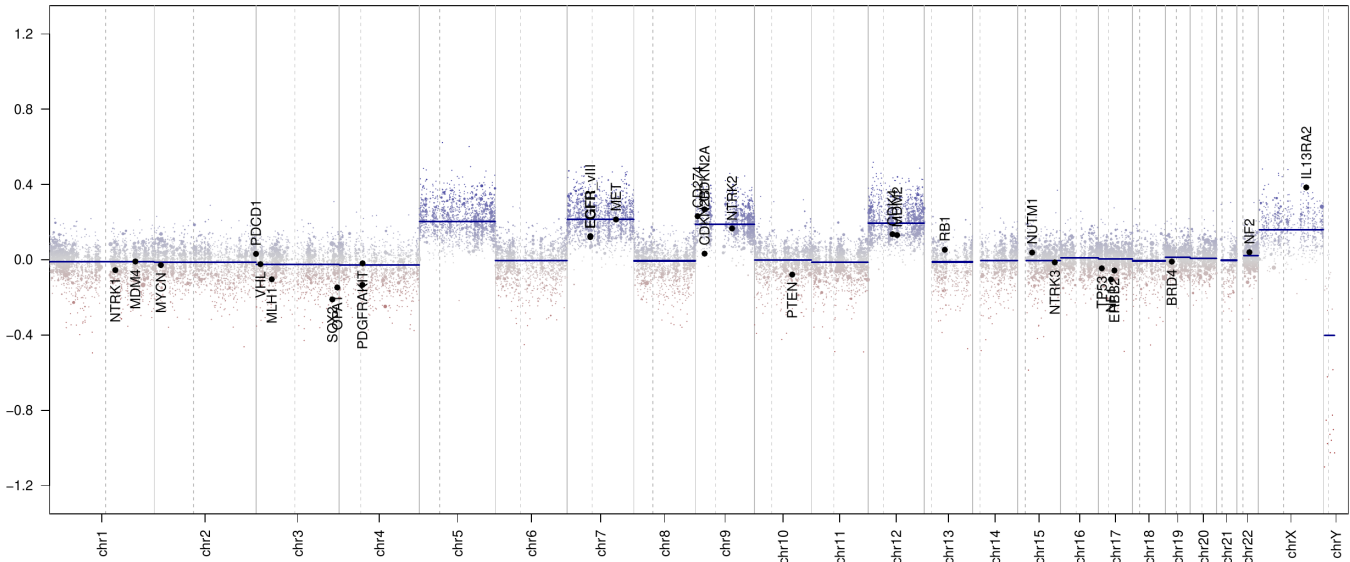
Close-up of UMAP for 204425700133_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 204425700133_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

204425700133_R04C01





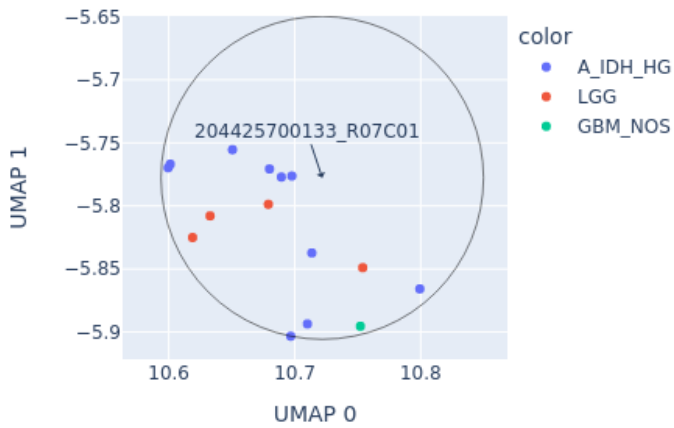
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Reference data	:	AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

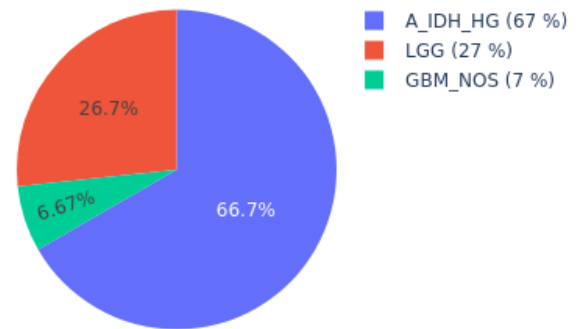
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reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



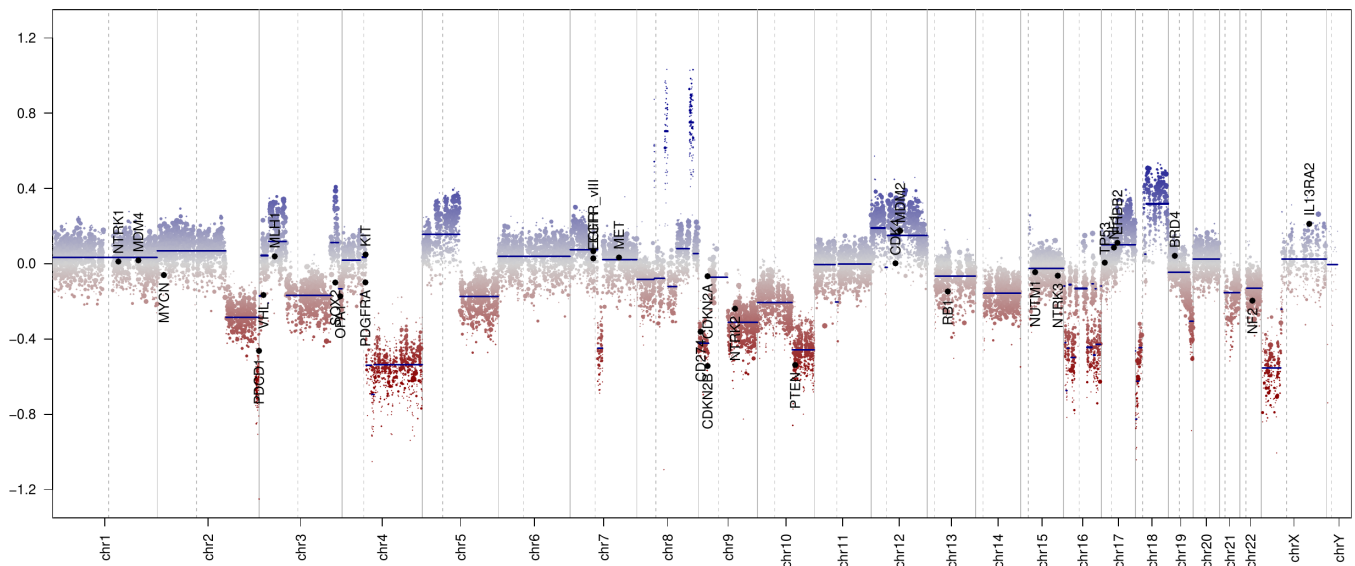
Neighbors in UMAP for 204425700133_R07C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

204425700133_R07C01





EpiDiP Report for Sample 205046550112_R05C01

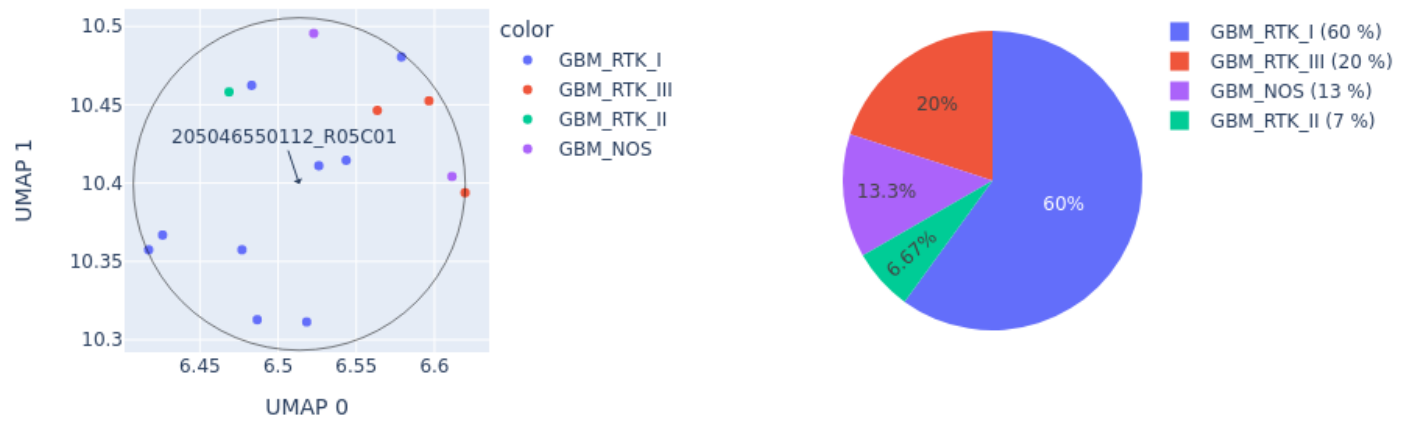
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

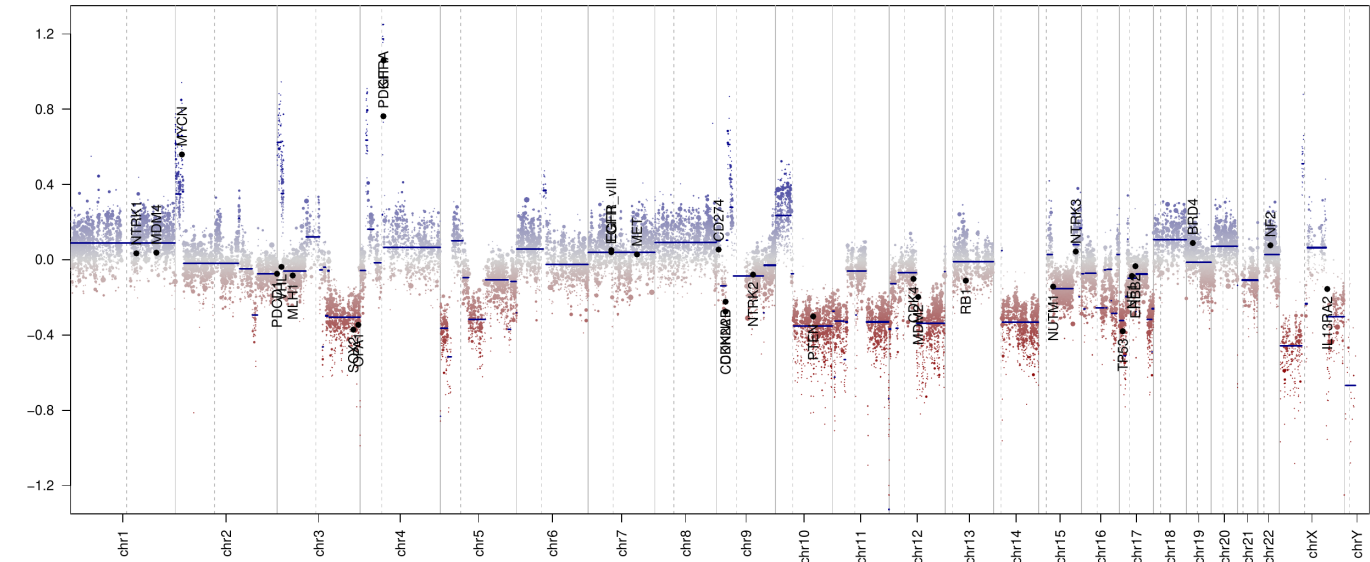
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reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205046550112_R05C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205046550112_R05C01





EpiDiP Report for Sample 205310760157_R03C01

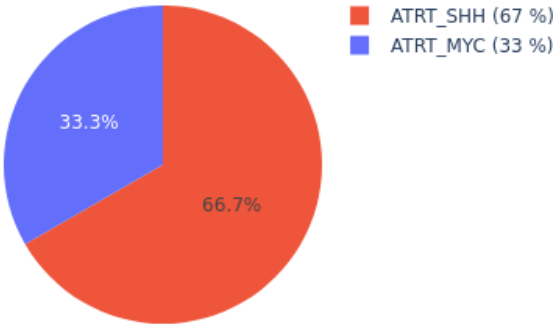
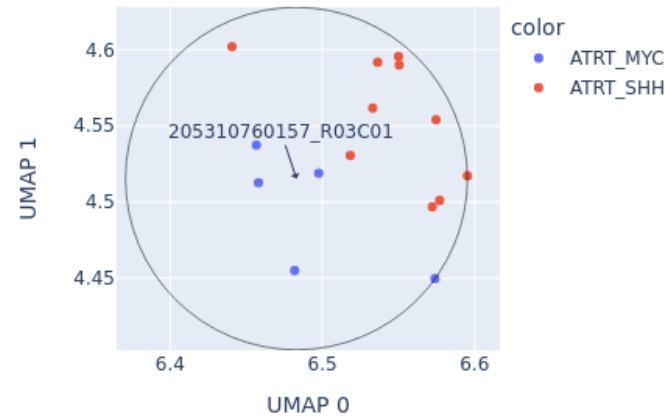
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Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

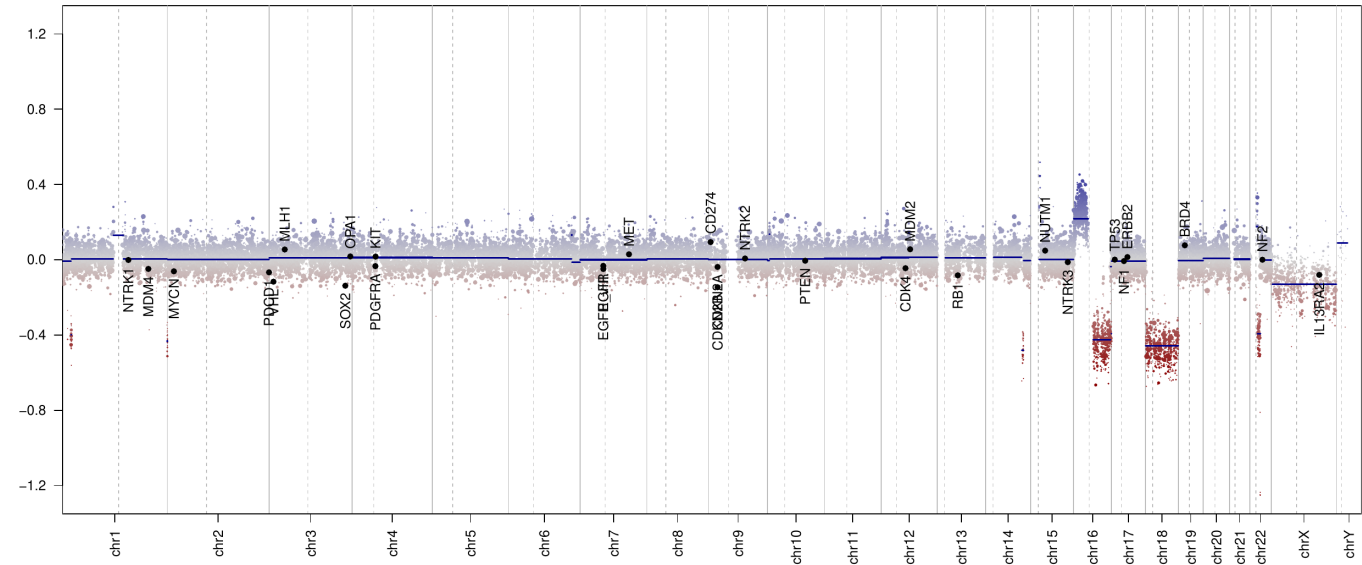
Close-up of UMAP for 205310760157_R03C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205310760157_R03C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205310760157_R03C01





EpiDiP Report for Sample 205495890138_R06C01

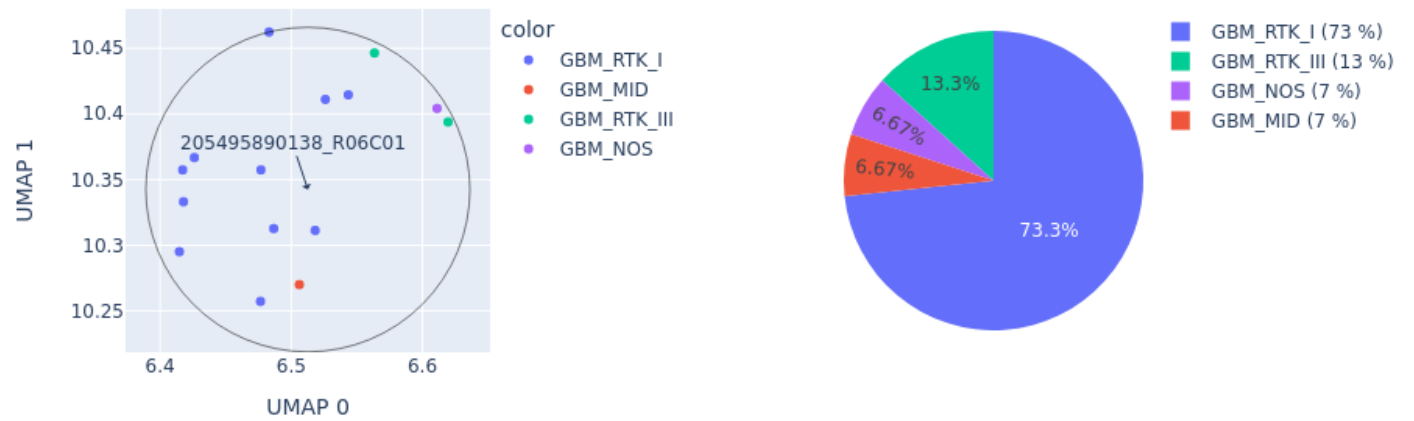
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

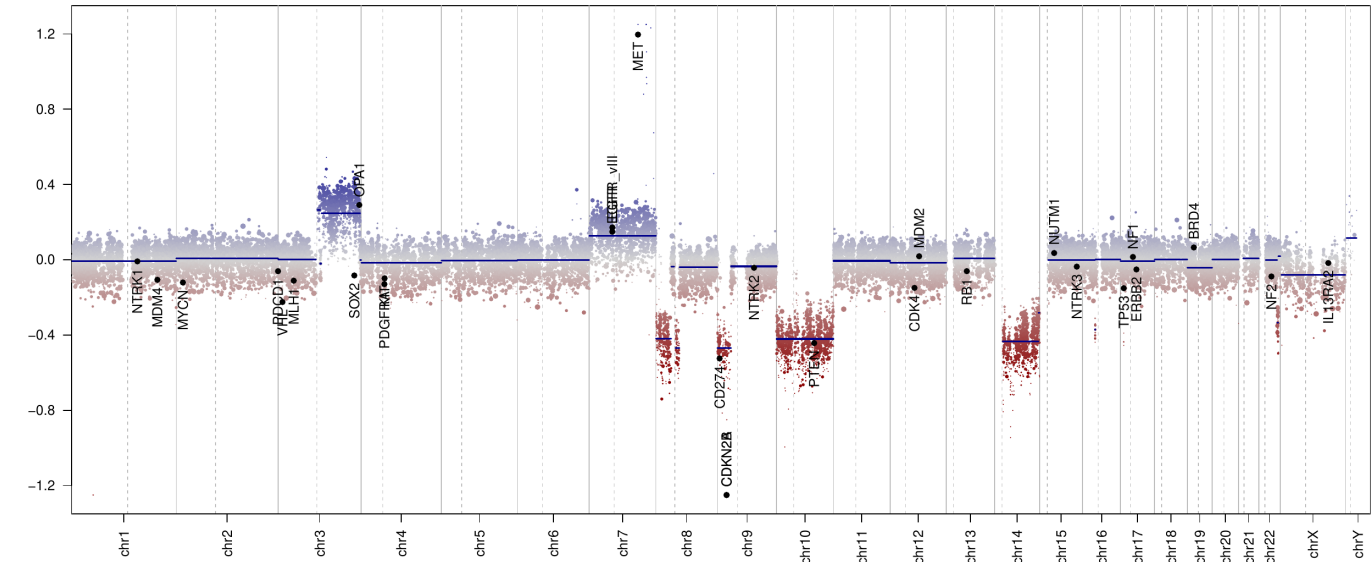
Close-up of UMAP for 205495890138_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205495890138_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205495890138_R06C01





EpiDiP Report for Sample 205814880164_R06C01

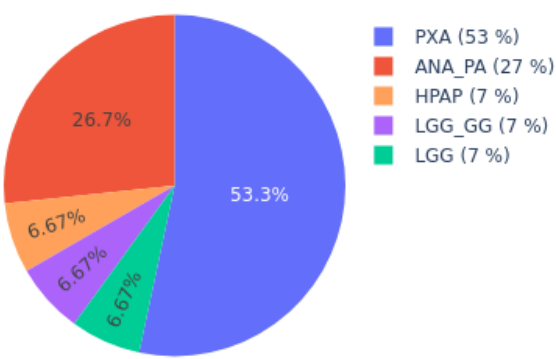
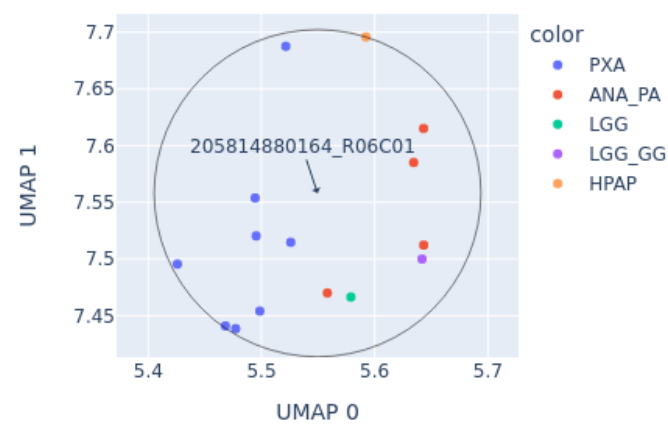
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450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

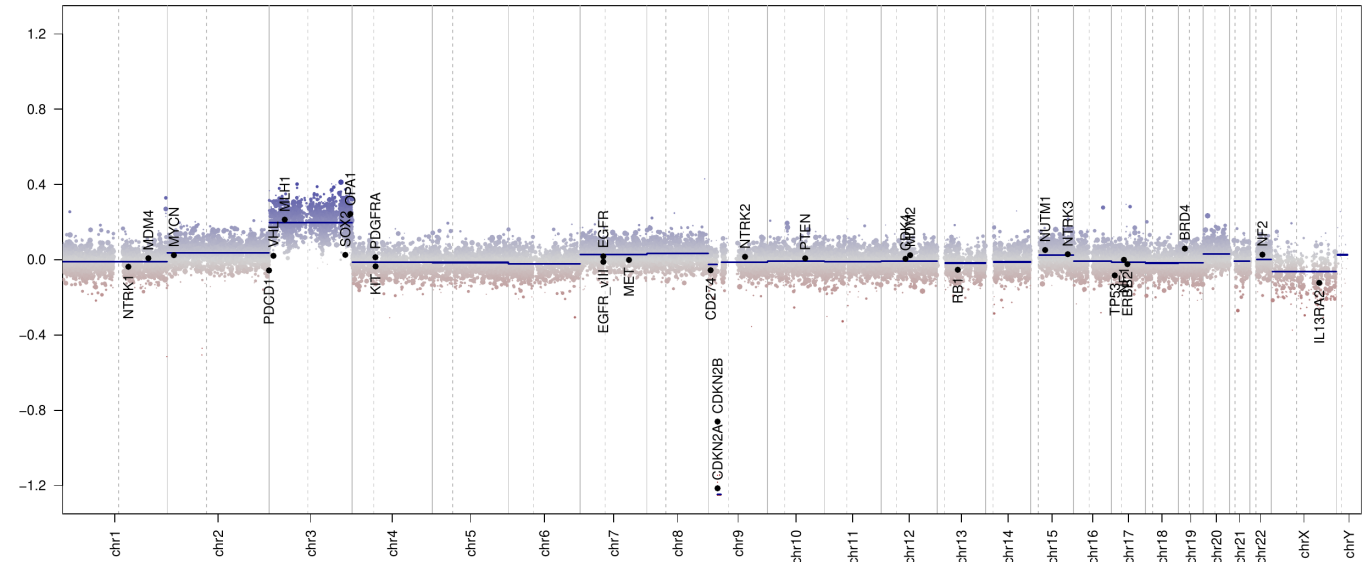
Close-up of UMAP for 205814880164_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205814880164_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205814880164_R06C01





EpiDiP Report for Sample 205828600180_R05C01

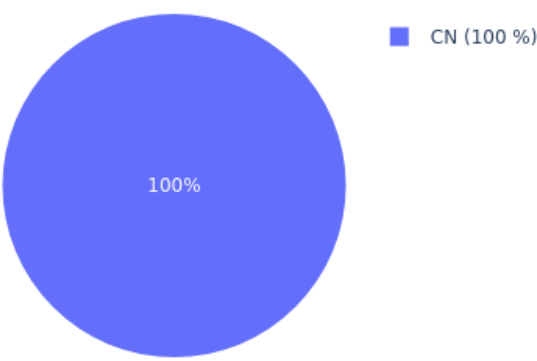
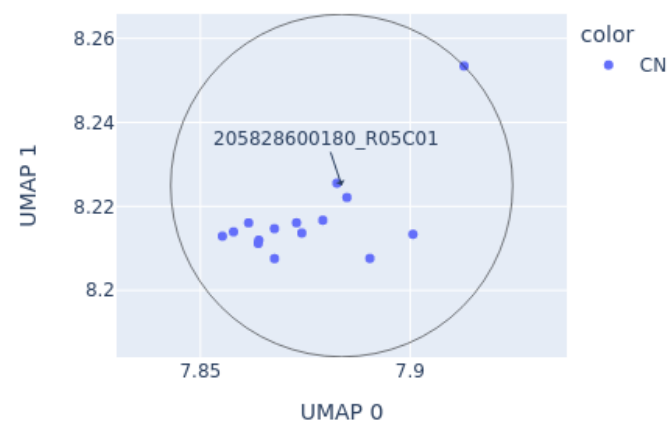
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

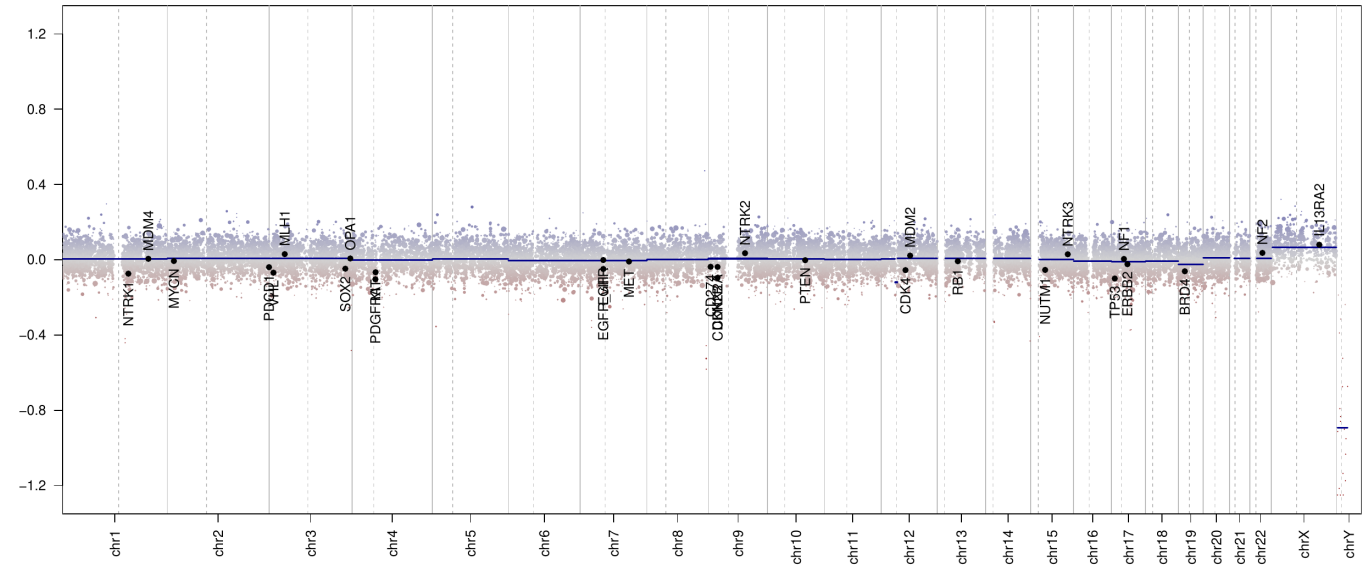
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reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205828600180_R05C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205828600180_R05C01





EpiDiP Report for Sample 205862290139_R04C01

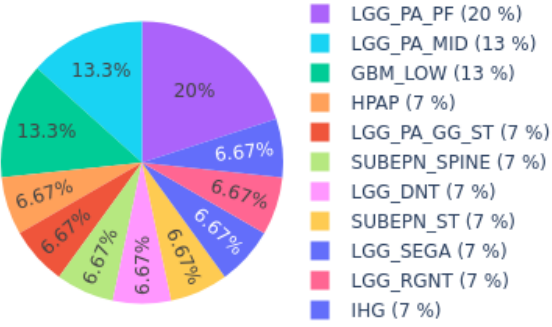
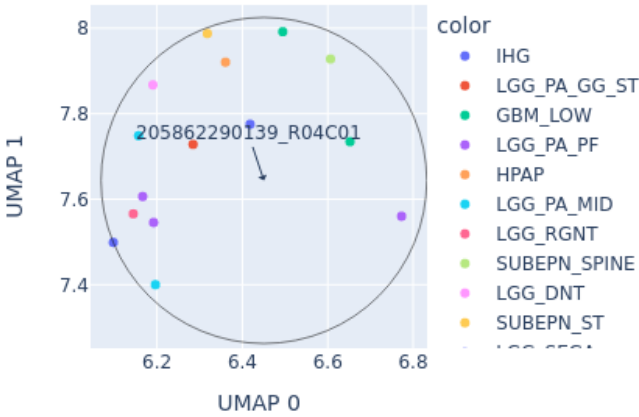
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

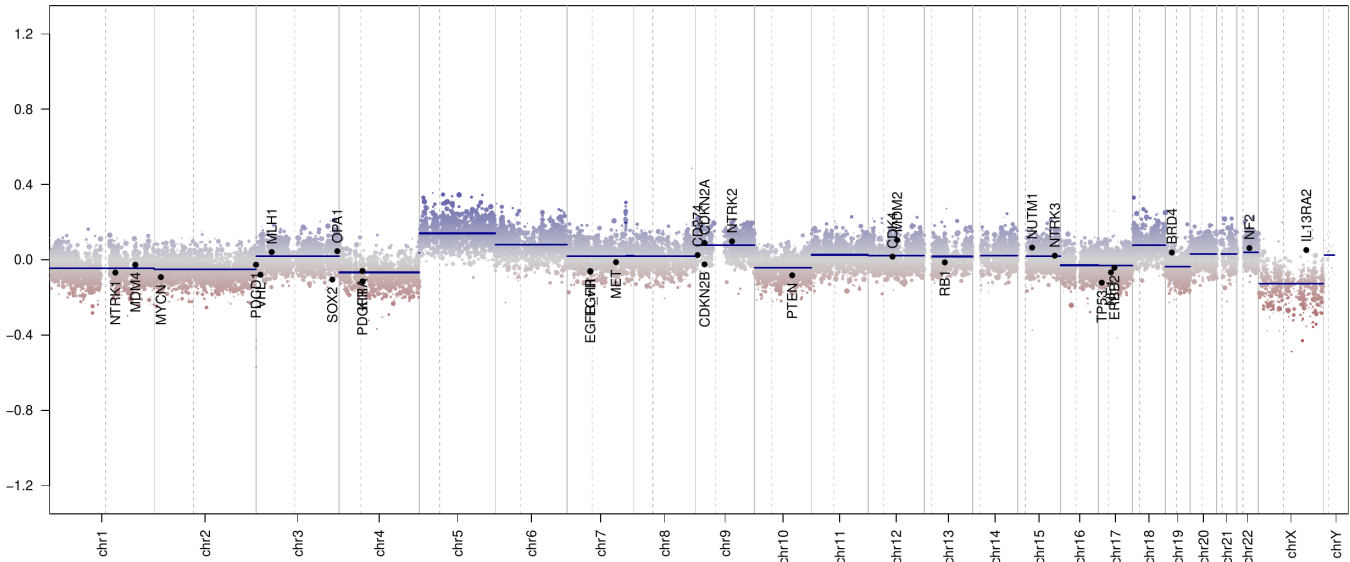
Close-up of UMAP for 205862290139_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 205862290139_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

205862290139_R04C01





EpiDiP Report for Sample 206439840021_R04C01

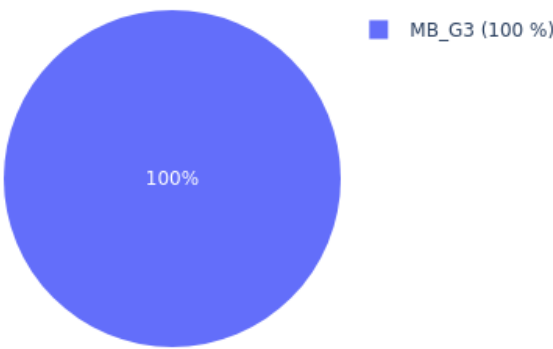
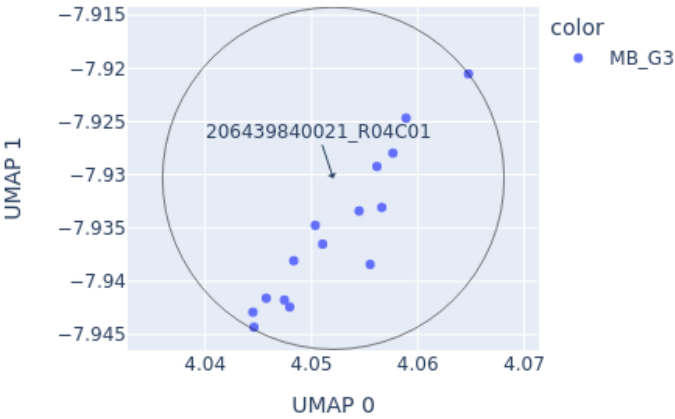
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

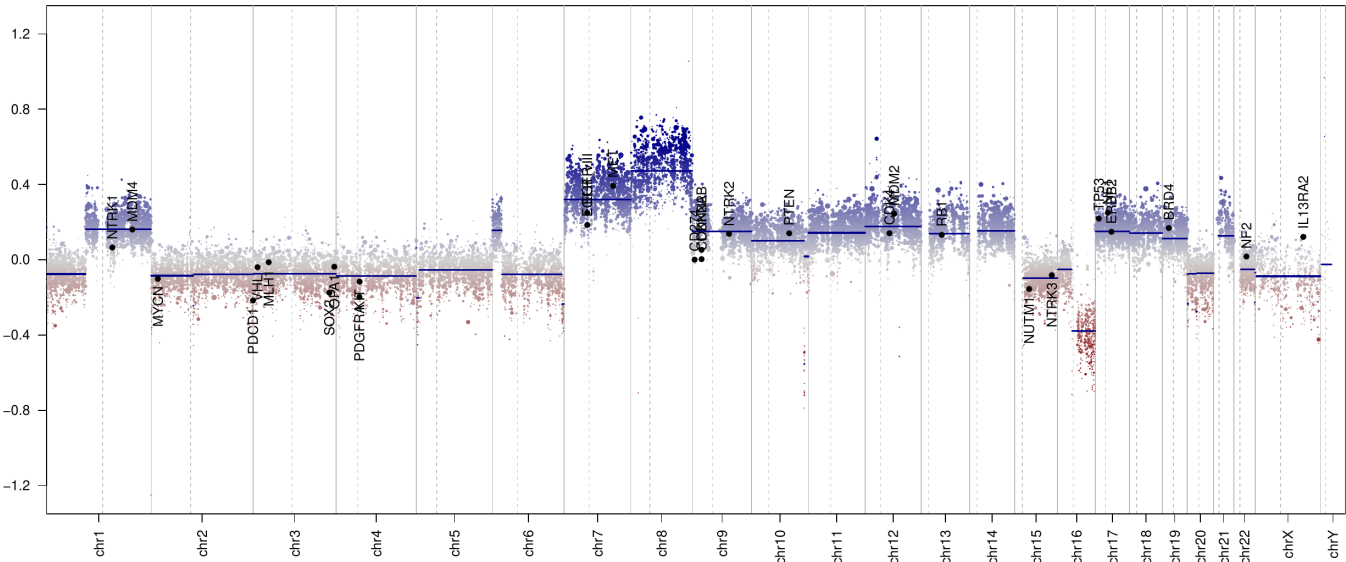
Close-up of UMAP for 206439840021_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 206439840021_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

206439840021_R04C01





EpiDiP Report for Sample 206486310052_R06C01

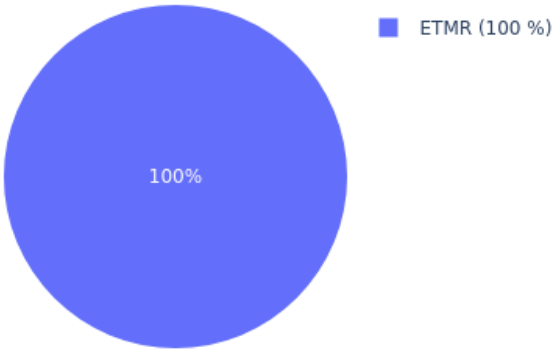
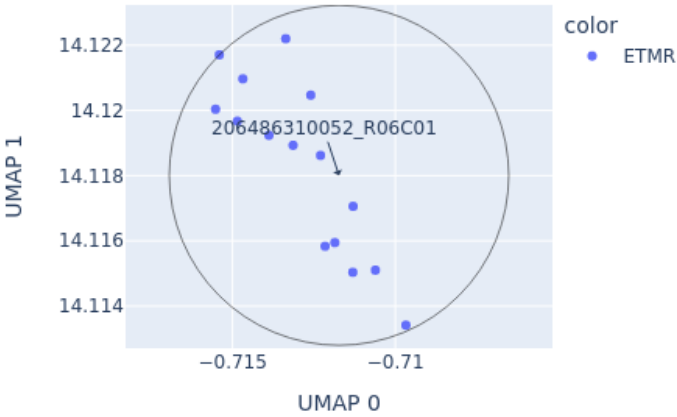
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Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

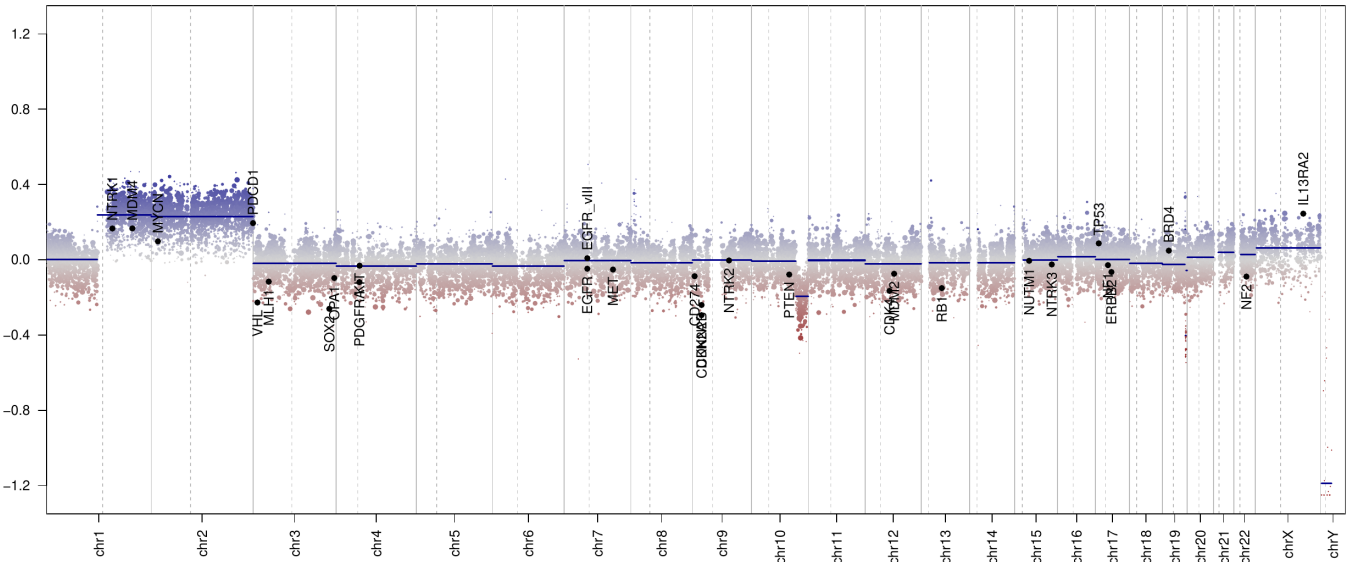
Close-up of UMAP for 206486310052_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 206486310052_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

206486310052_R06C01





EpiDiP Report for Sample 206486310053_R07C01

Generated on : epidip02 / 20260616_172228
Detected barcode : undetermined
Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

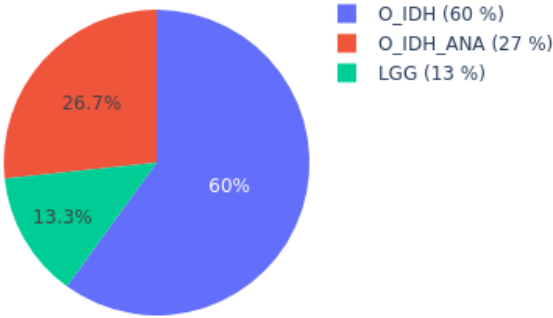
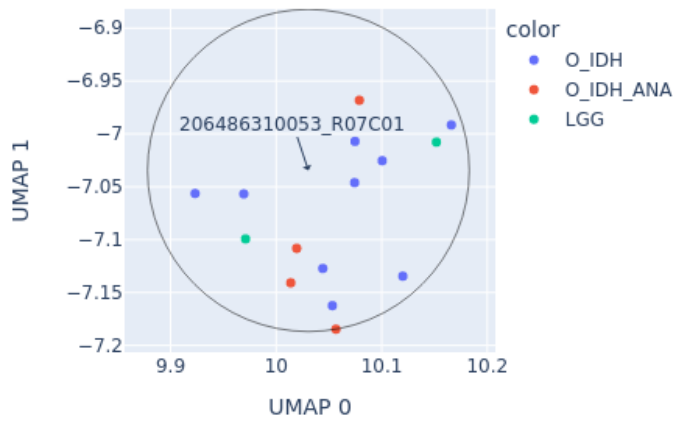
Methylation UMAP Score

Close-up of UMAP for 206486310053_R07C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

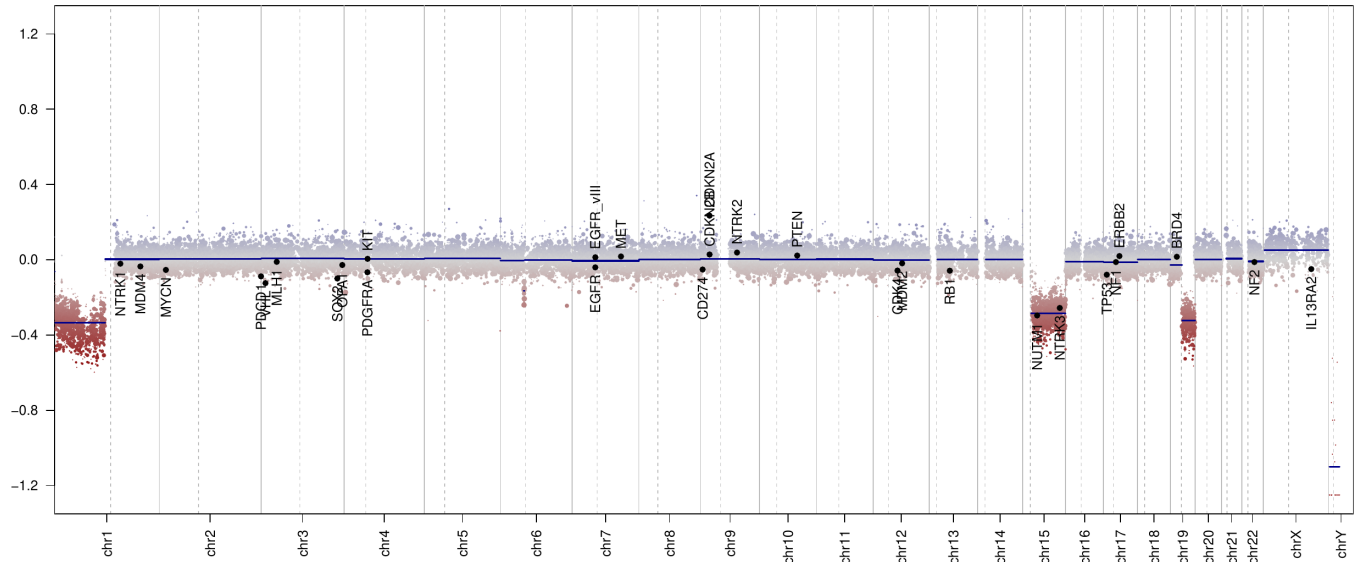
Neighbors in UMAP for 206486310053_R07C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

206486310053_R07C01





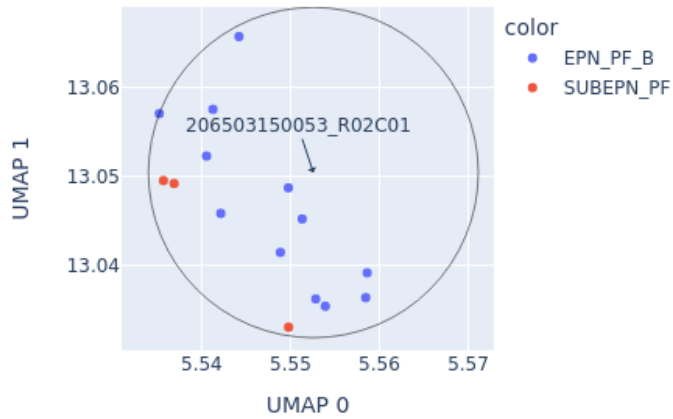
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Methylation UMAP plot

Methylation UMAP Score

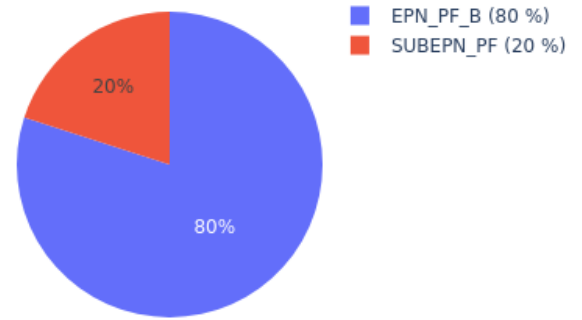
Close-up of UMAP for 206503150053_R02C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



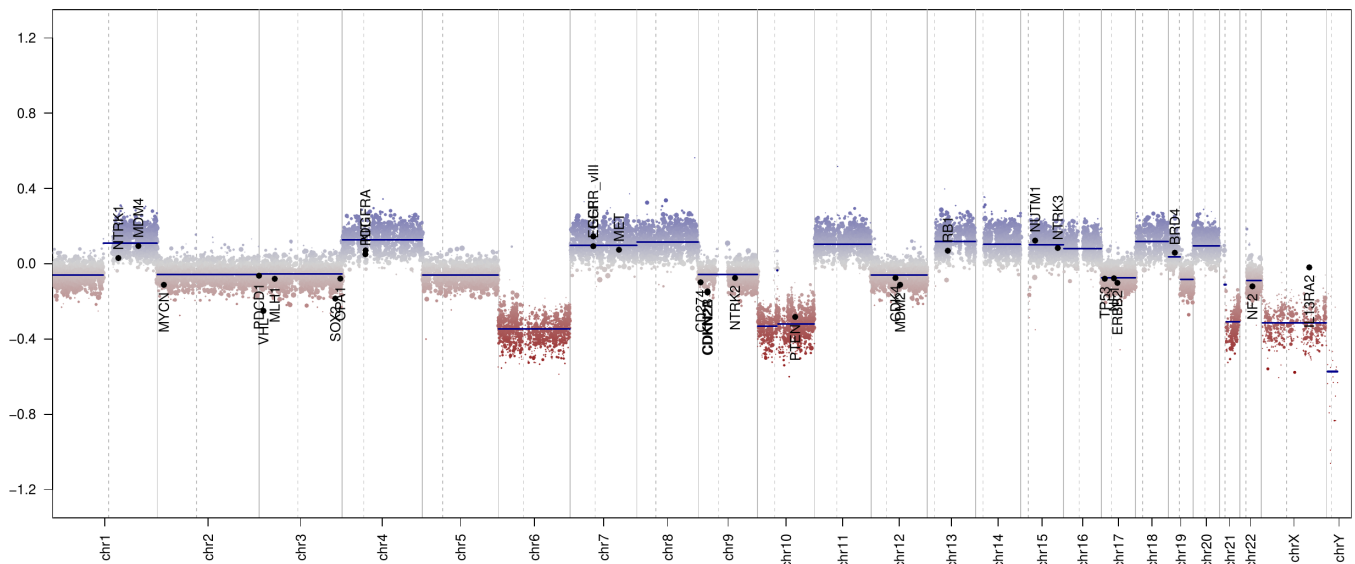
Neighbors in UMAP for 206503150053_R02C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

206503150053_R02C01





EpiDiP Report for Sample 207015200146_R01C01

Generated on : epidip02 / 20260616_171731
Detected barcode : undetermined
Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

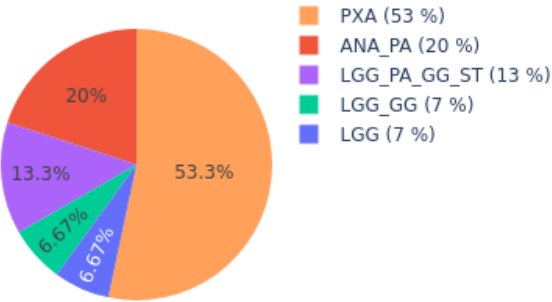
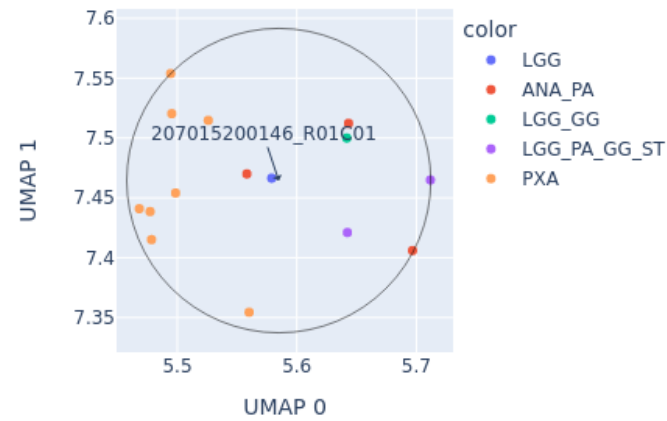
Methylation UMAP Score

Close-up of UMAP for 207015200146_R01C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

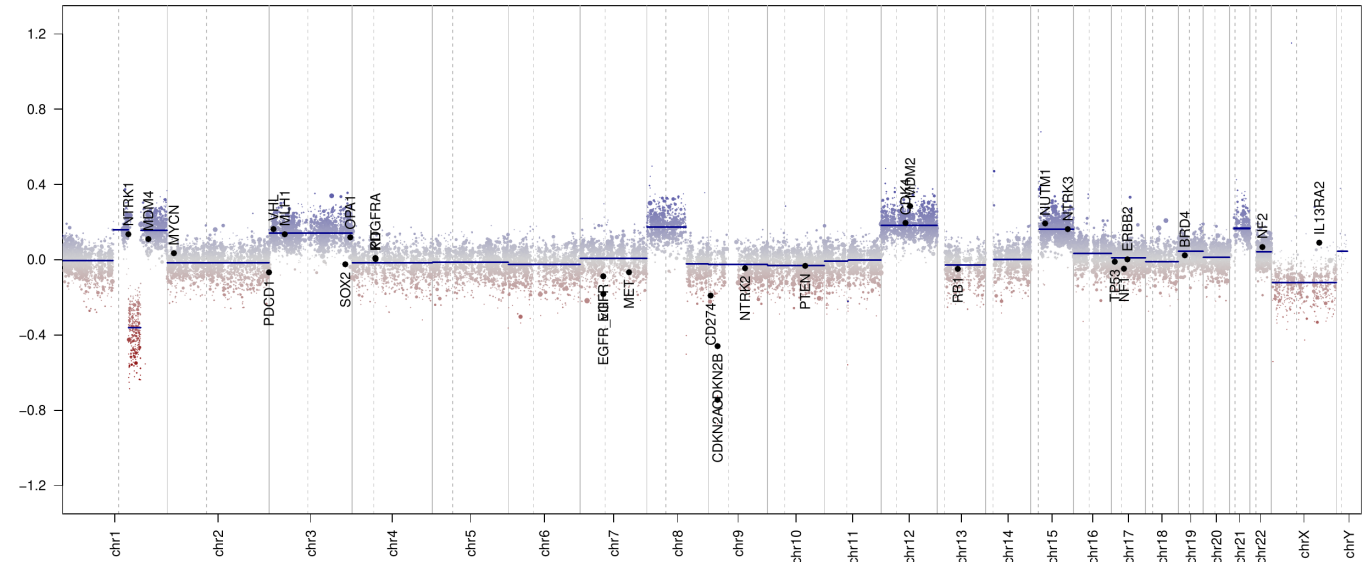
Neighbors in UMAP for 207015200146_R01C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207015200146_R01C01





EpiDiP Report for Sample 207335100018_R04C01

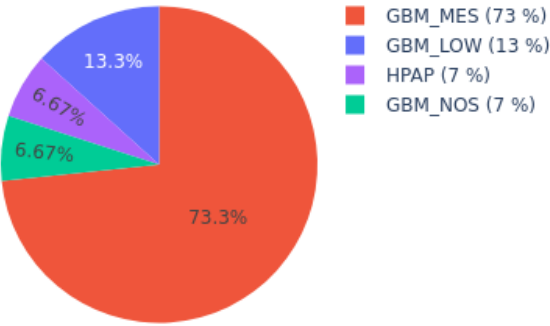
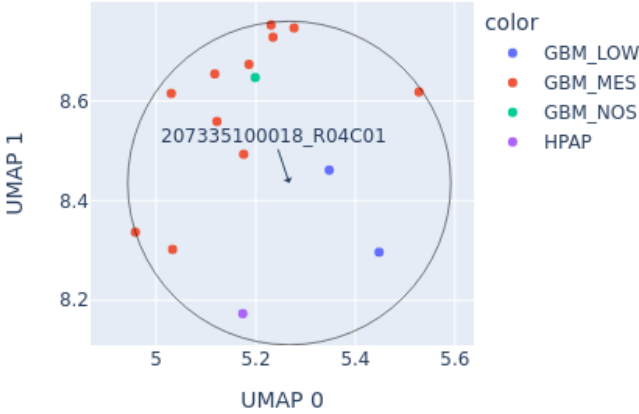
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Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

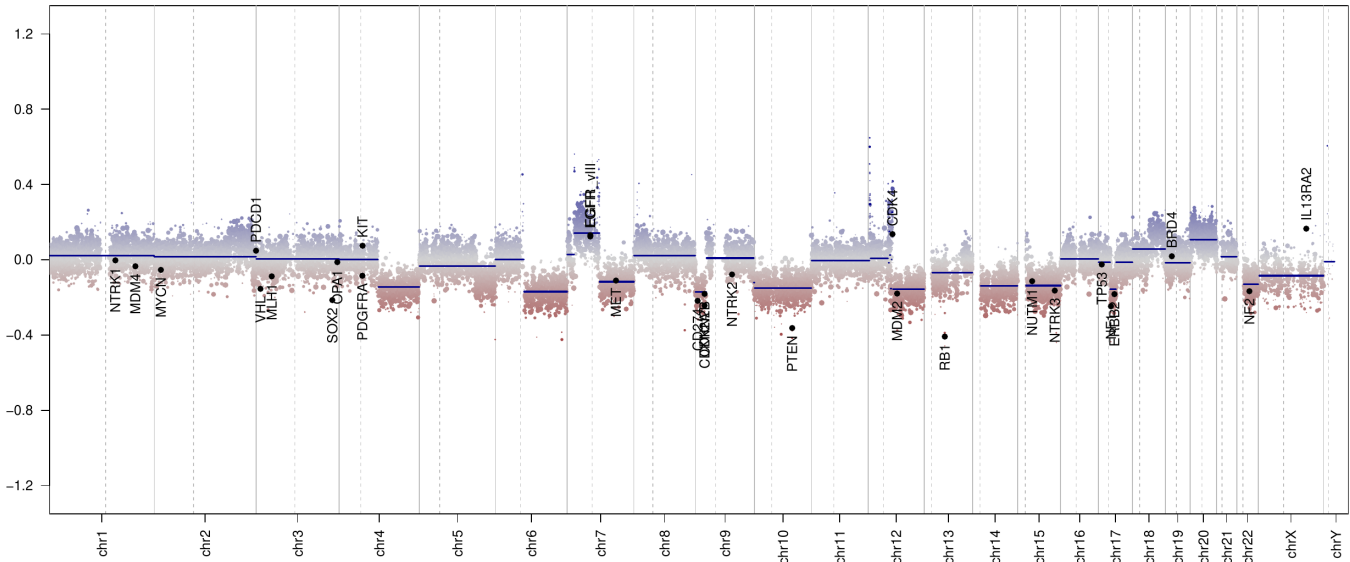
Close-up of UMAP for 207335100018_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207335100018_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207335100018_R04C01





EpiDiP Report for Sample 207335100077_R06C01

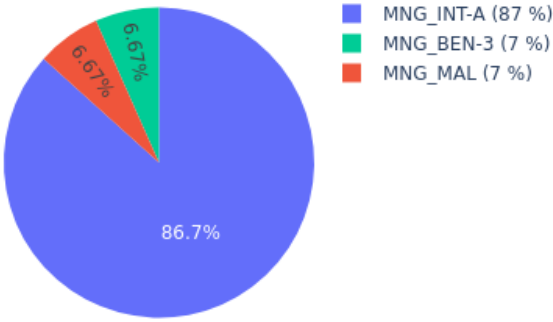
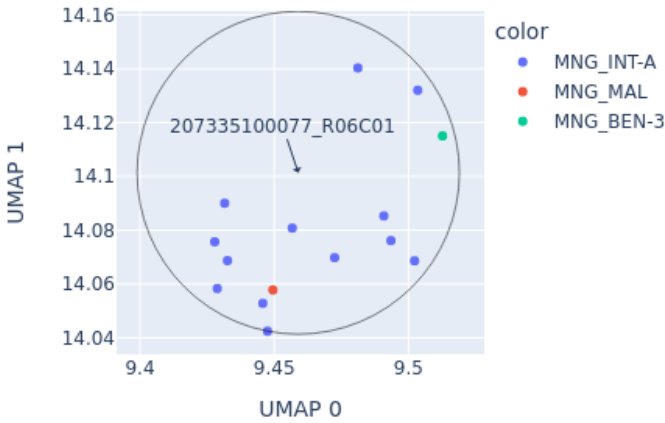
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450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

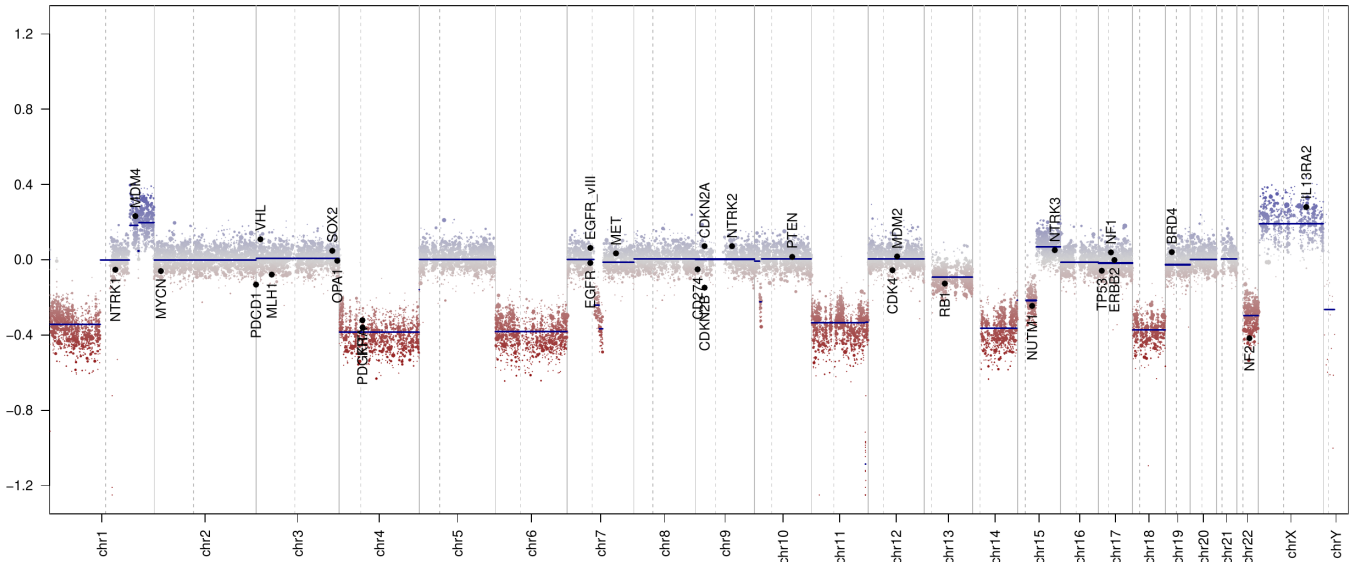
Close-up of UMAP for 207335100077_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207335100077_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207335100077_R06C01





EpiDiP Report for Sample 207716530064_R06C01

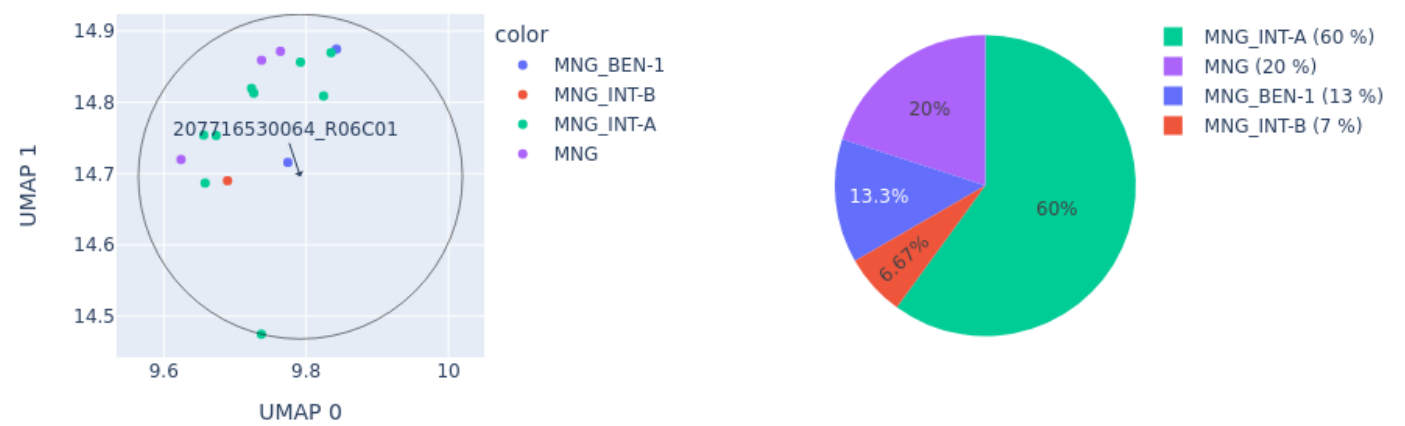
Generated on : epidip02 / 20260616_172802
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450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

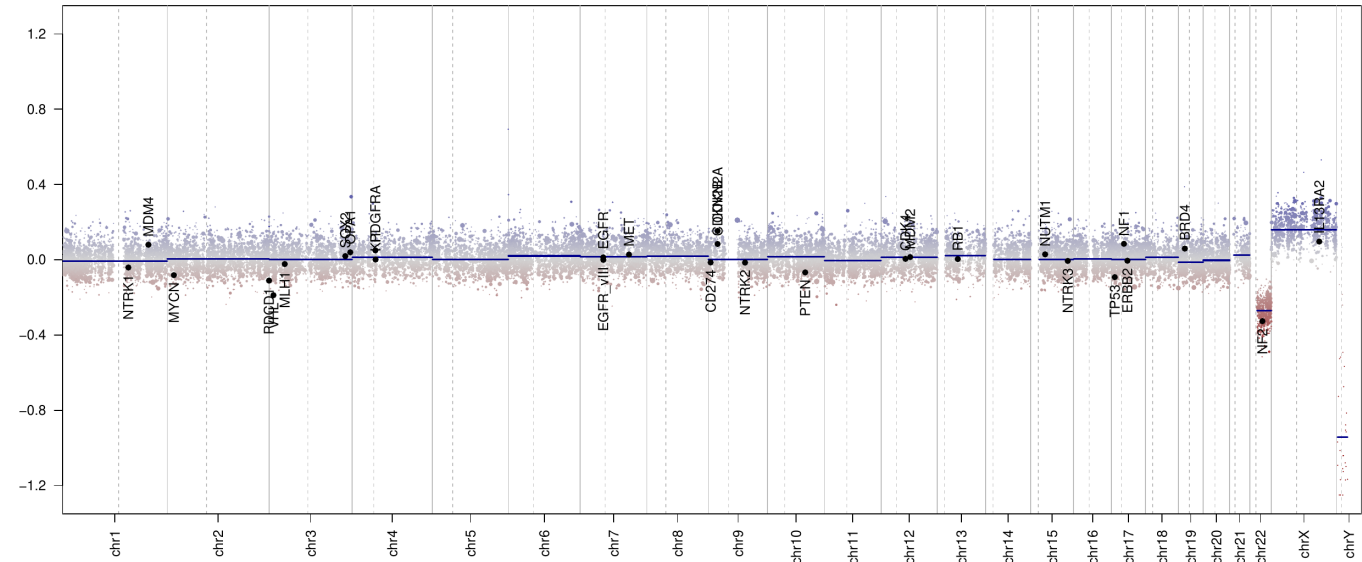
Close-up of UMAP for 207716530064_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207716530064_R06C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207716530064_R06C01



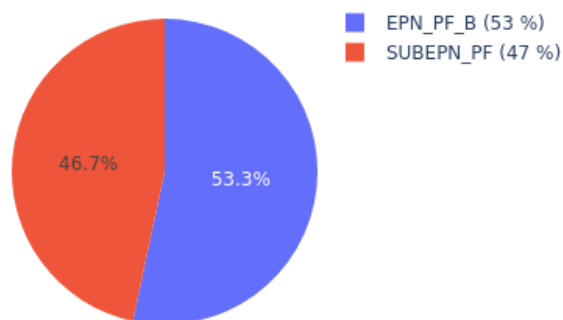


Methylation UMAP plot

Methylation UMAP Score

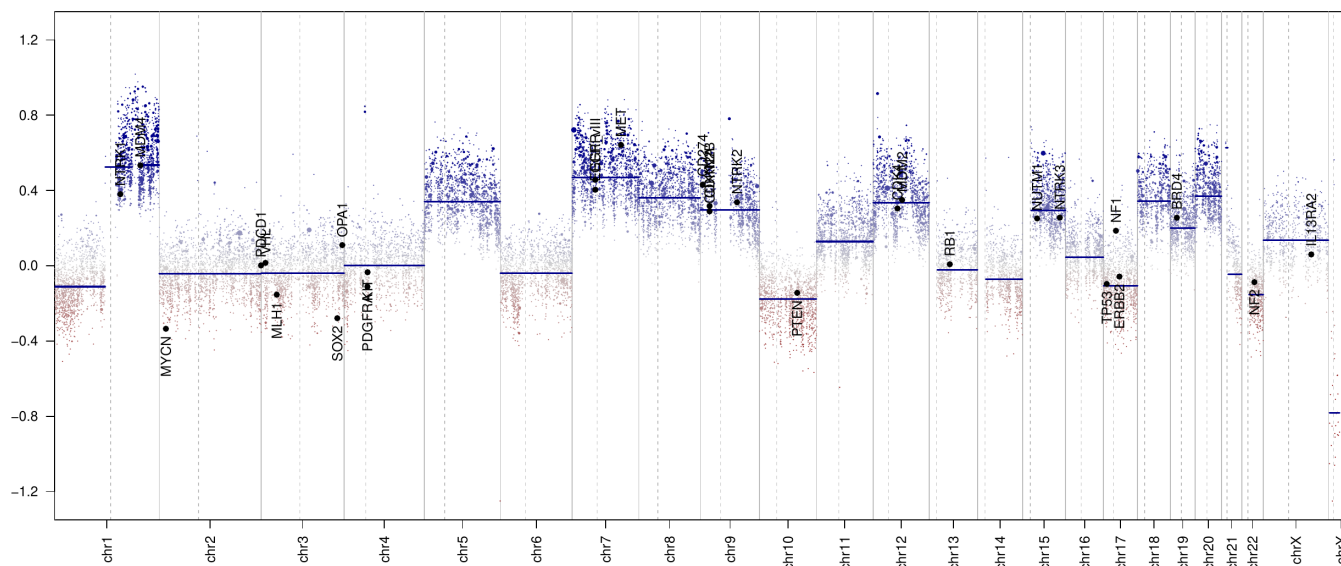
Neighbors in UMAP for 207716530064 R07C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207716530064 R07C01





EpiDiP Report for Sample 207716530065_R04C01

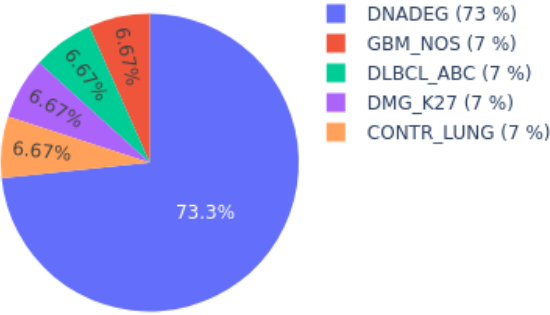
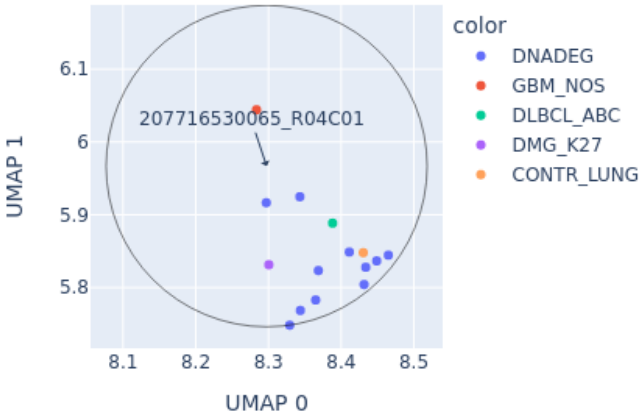
Generated on : epidip02 / 20260616_171900
Detected barcode : undetermined
Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

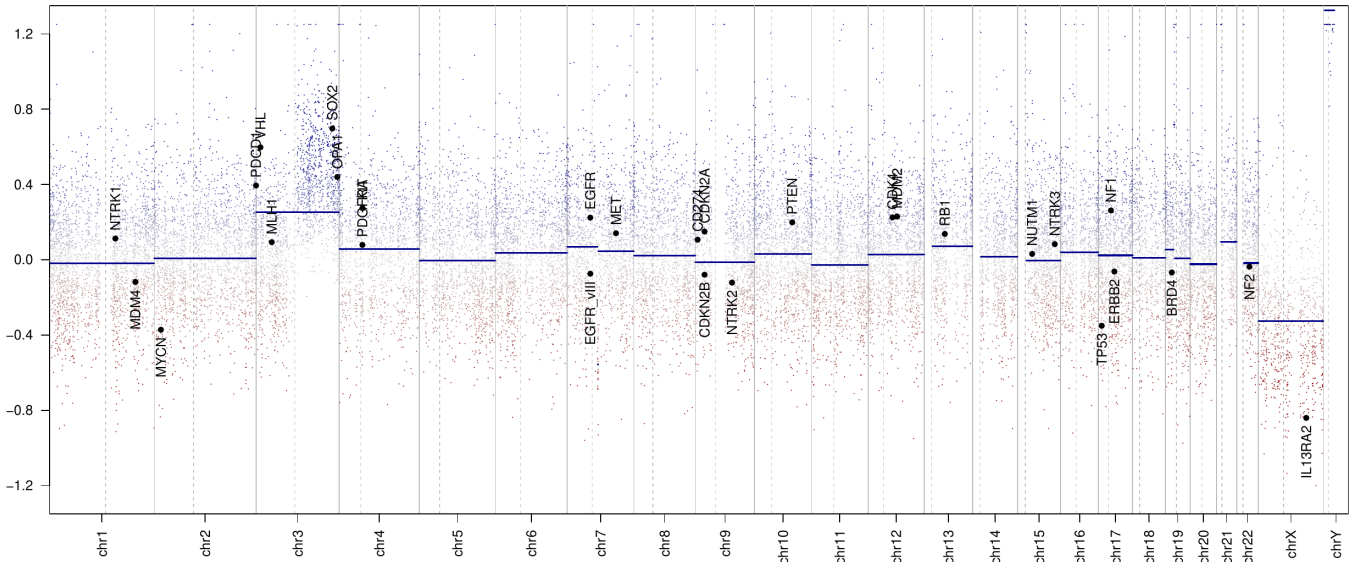
Close-up of UMAP for 207716530065_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207716530065_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207716530065_R04C01





EpiDiP Report for Sample 207755830124_R03C01

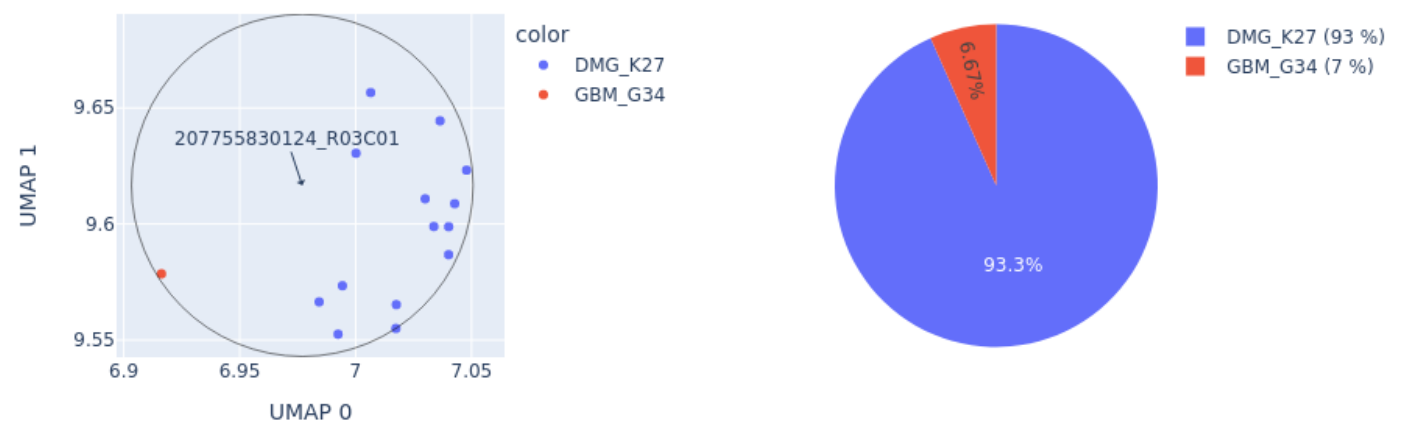
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

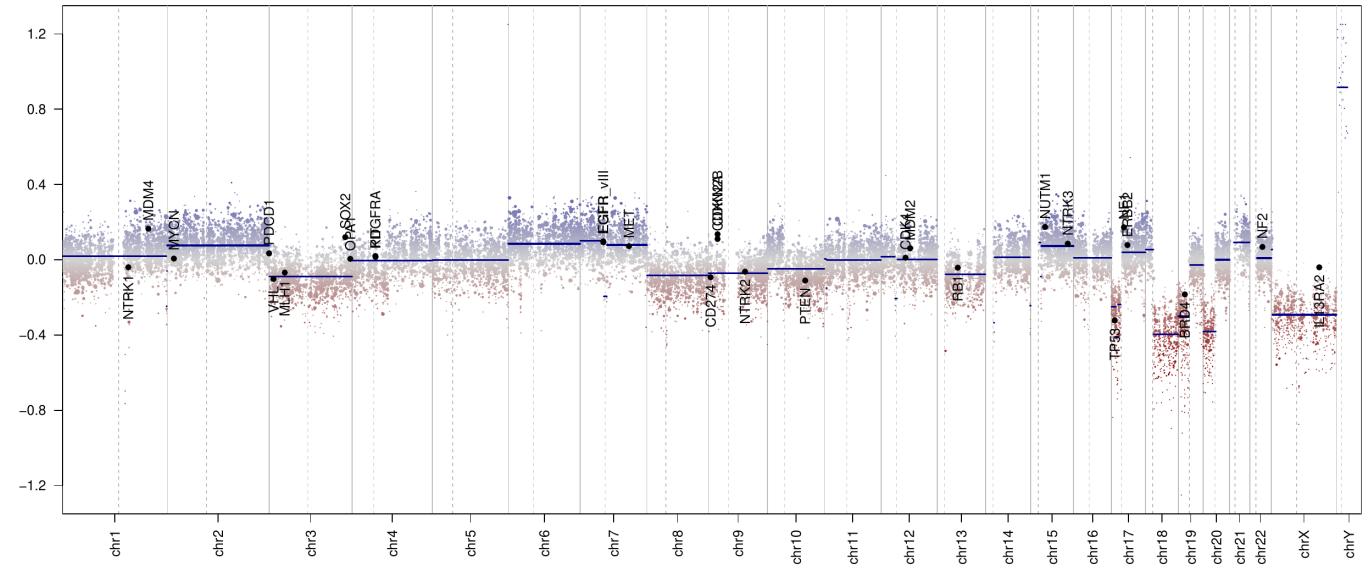
Close-up of UMAP for 207755830124_R03C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207755830124_R03C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207755830124_R03C01





EpiDiP Report for Sample 207953350017_R04C01

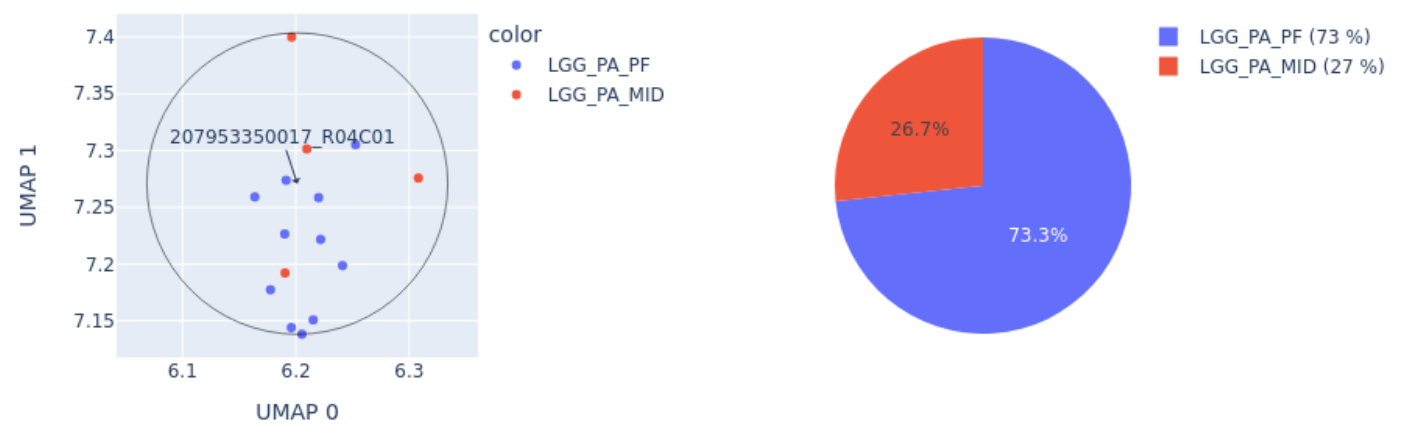
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450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

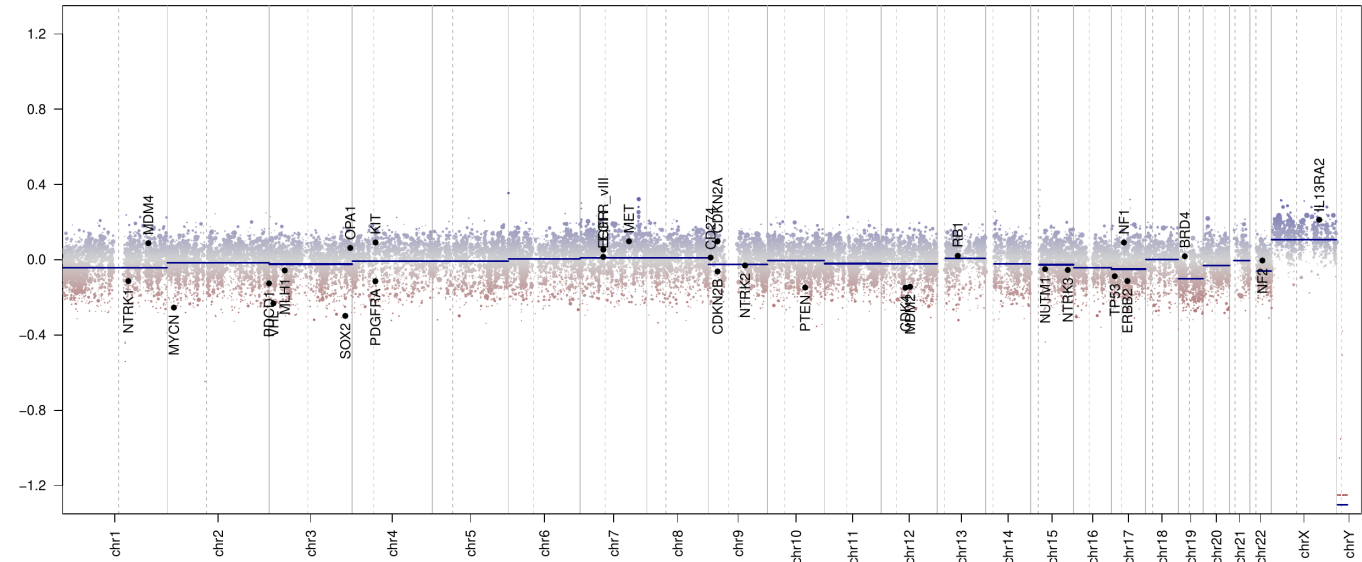
Close-up of UMAP for 207953350017_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 207953350017_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

207953350017_R04C01





EpiDiP Report for Sample 208010440031_R02C01

Generated on : epidip02 / 20260616_171701
Detected barcode : undetermined
Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

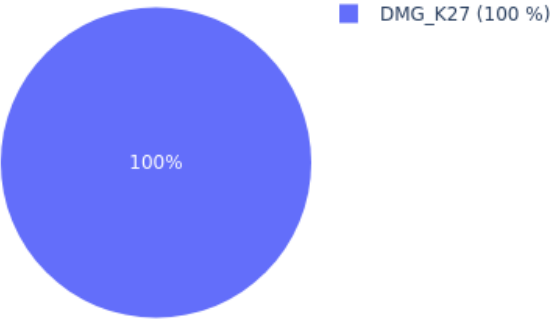
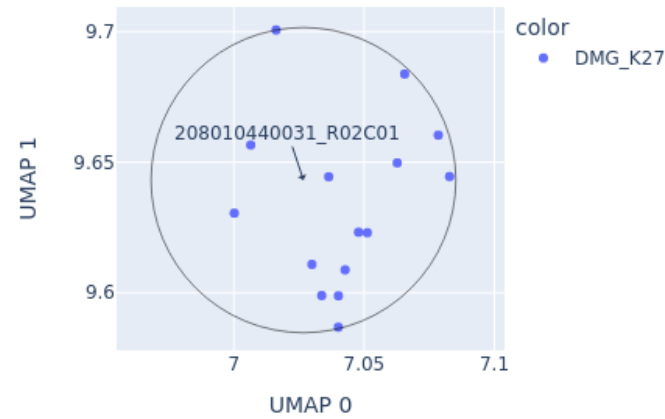
Methylation UMAP Score

Close-up of UMAP for 208010440031_R02C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

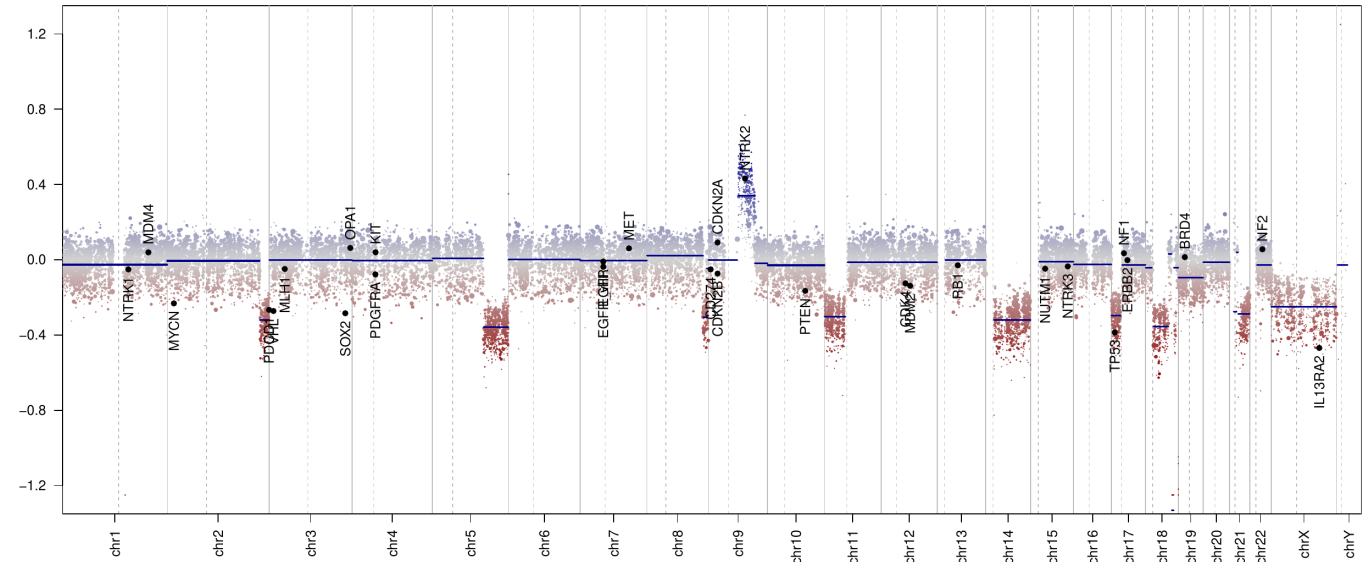
Neighbors in UMAP for 208010440031_R02C01

reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

208010440031_R02C01





EpiDiP Report for Sample 208066090054_R07C01

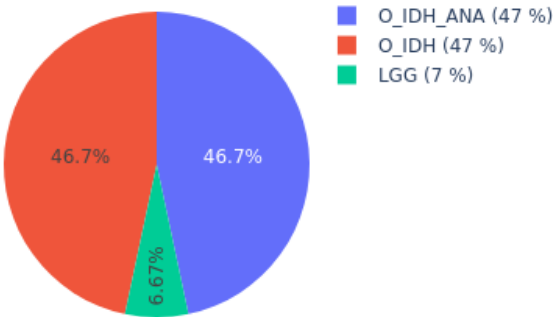
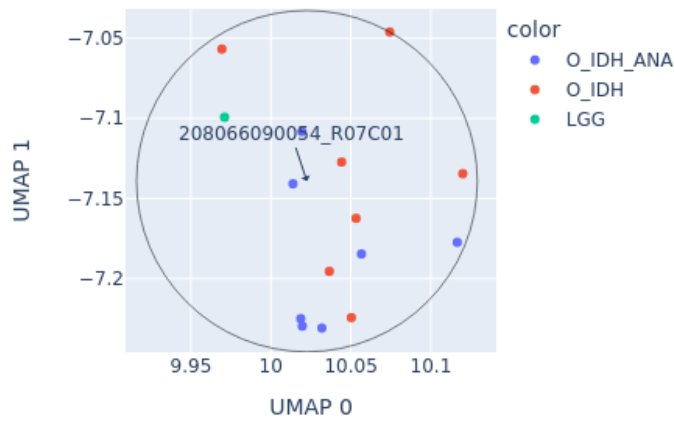
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

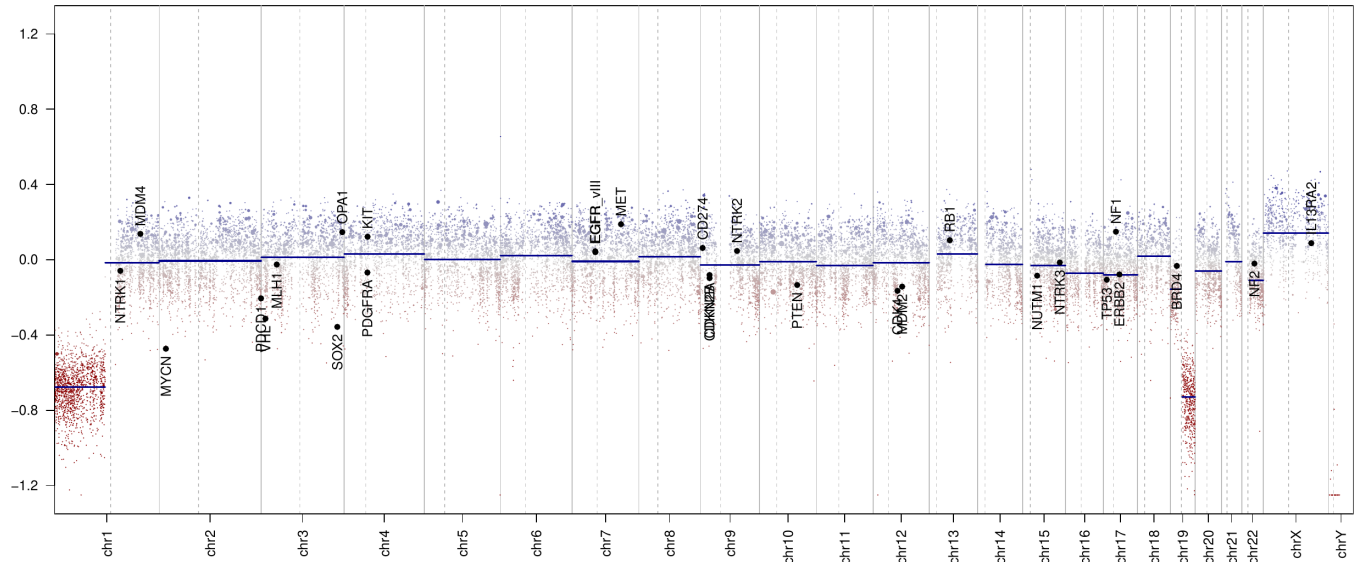
Close-up of UMAP for 208066090054_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 208066090054_R07C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

208066090054_R07C01





EpiDiP Report for Sample 208069740057_R02C01

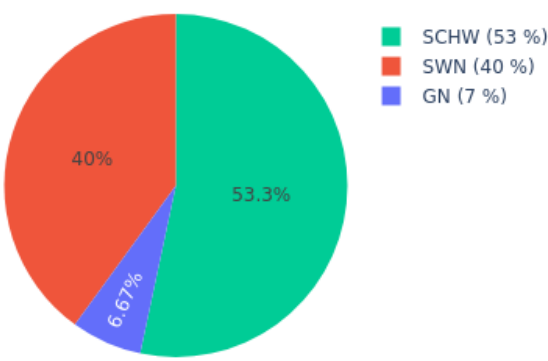
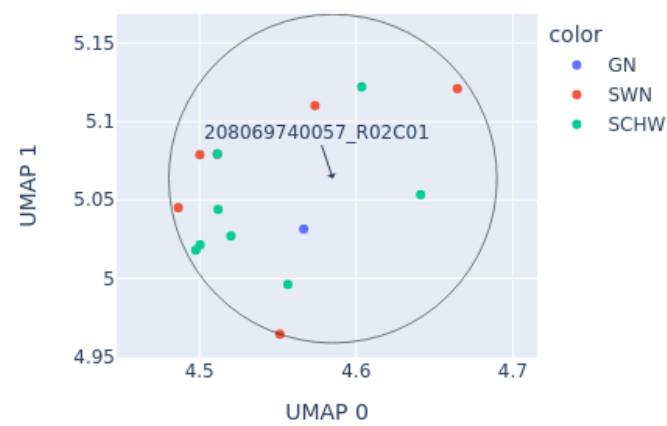
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Valid reads : 0
450K overlap CpG count : 0
Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

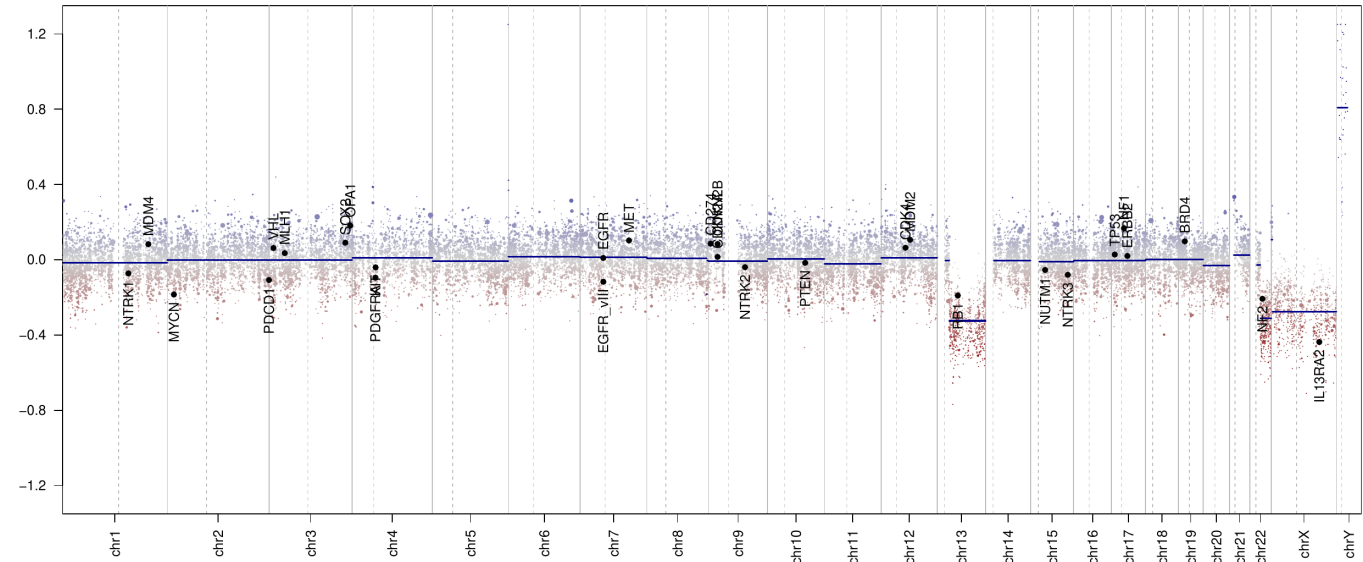
Close-up of UMAP for 208069740057_R02C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 208069740057_R02C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

208069740057_R02C01





EpiDiP Report for Sample 208160540160_R04C01

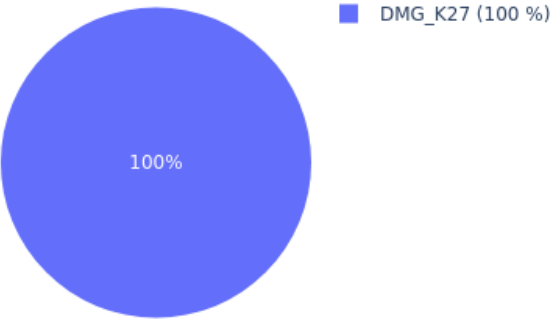
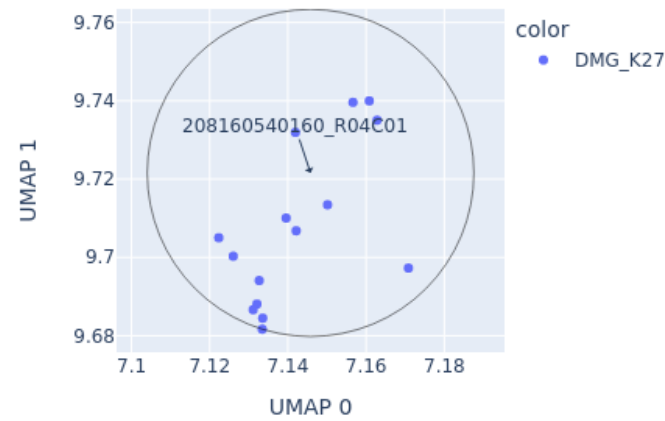
Generated on : epidip02 / 20260616_171630
Detected barcode : undetermined
Valid reads : 0
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Reference data : AllIDATv2_20210804_HPAP_Sarc

Methylation UMAP plot

Methylation UMAP Score

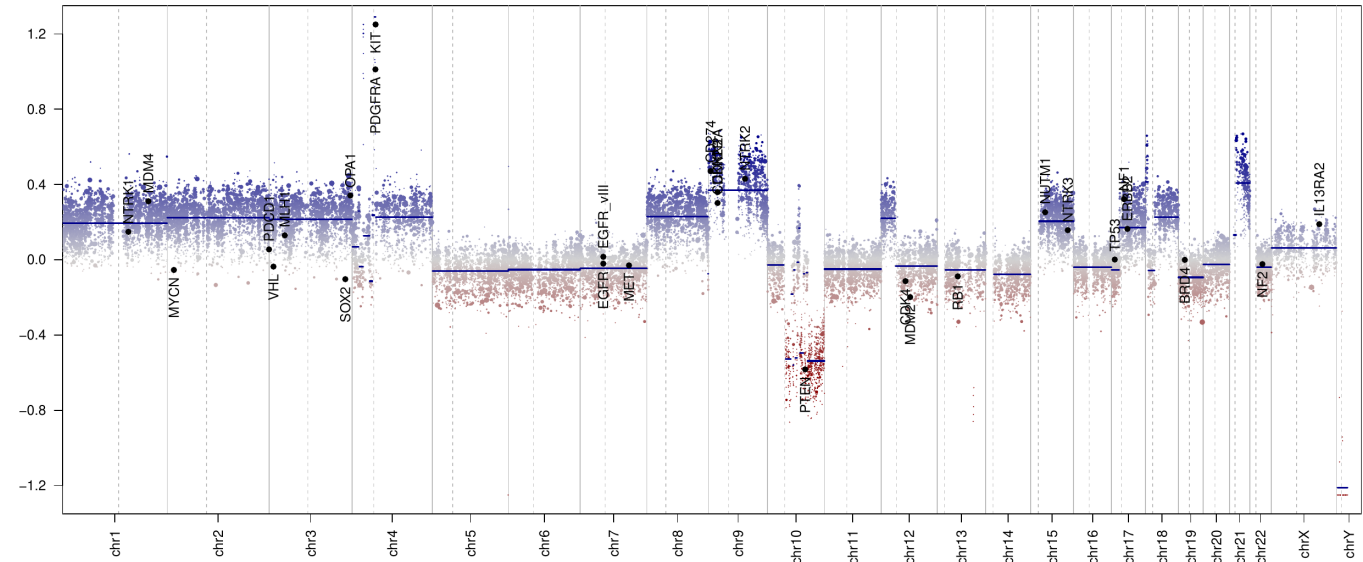
Close-up of UMAP for 208160540160_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs

Neighbors in UMAP for 208160540160_R04C01
reference: AllIDATv2_20210804_HPAP_Sarc.xlsx (19967 cases), 0 CpGs



Copy number plot

208160540160_R04C01





Methylation UMAP plot

Close-up of UMAP for 208285670157_R04C01

Neighbors in UMAP for 208285670157_R04C01

A pie chart illustrating the distribution of histological types of brain tumors. The chart is divided into five segments, each representing a different histological type and its corresponding percentage of the total. The segments are: ANA_PA (33%), DLGNT (33%), HPAP (20%), LGG_PA_GG_ST (7%), and LGG (7%). The segments are color-coded: ANA_PA is red, DLGNT is blue, HPAP is orange, LGG_PA_GG_ST is purple, and LGG is green.

Histological Type	Percentage
ANA_PA	33 %
DLGNT	33 %
HPAP	20 %
LGG_PA_GG_ST	7 %
LGG	7 %