PDAC gene expression analysis

Richard Moffitt

Contents
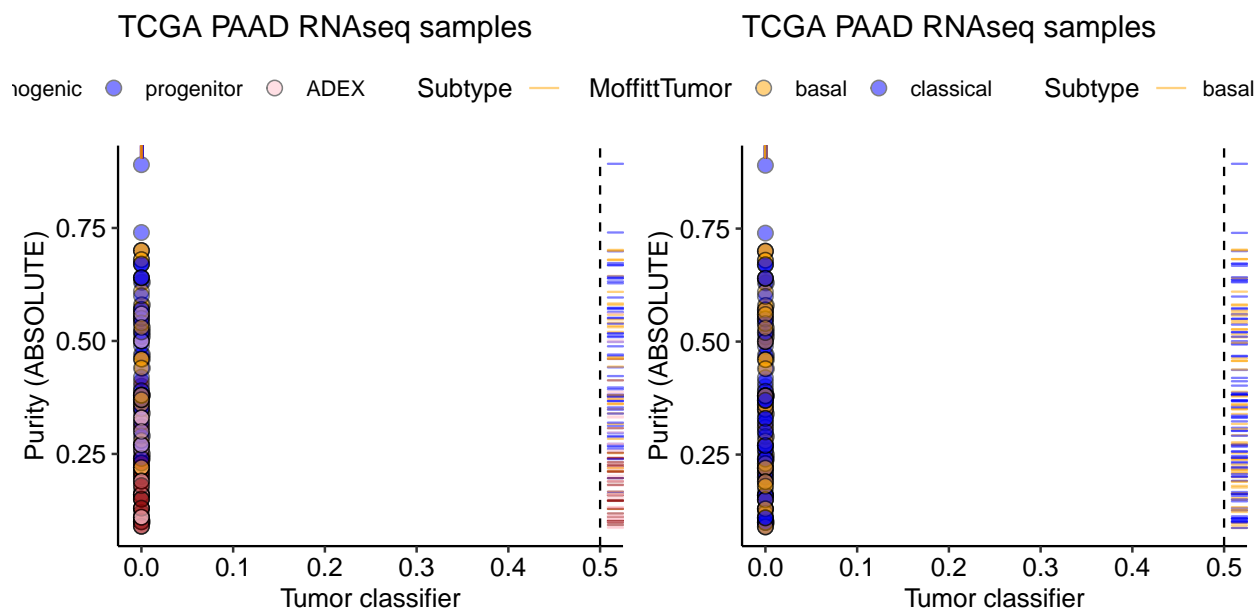
Setup

load required libraries
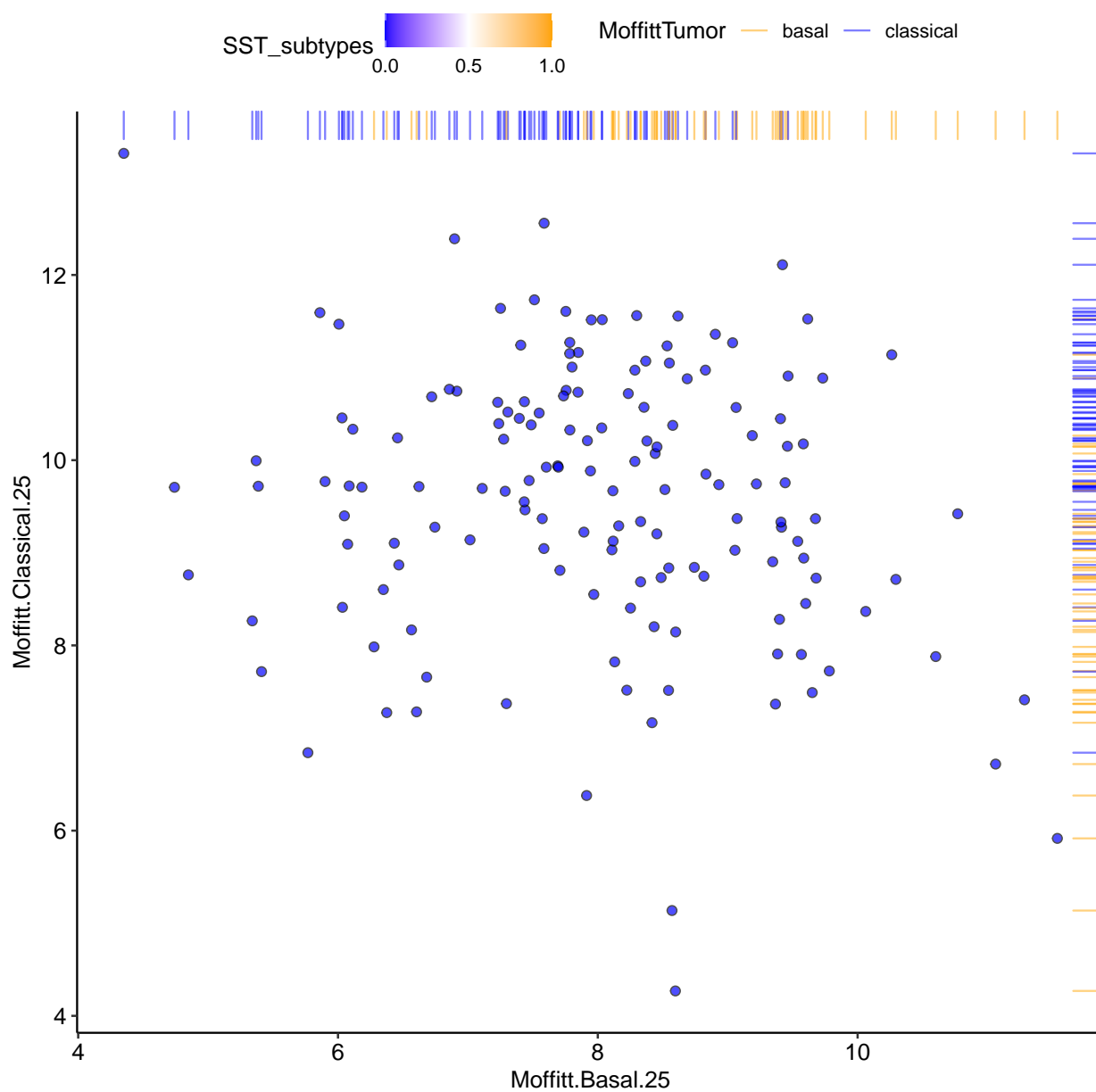
Select data set

Calculate signature scores and SSC

Results

Tumor classifier and ABSOLUTE

```
## 'geom_smooth()' using formula 'y ~ x'
## 'geom_smooth()' using formula 'y ~ x'
```

TCGA PAAD RNAseq samples

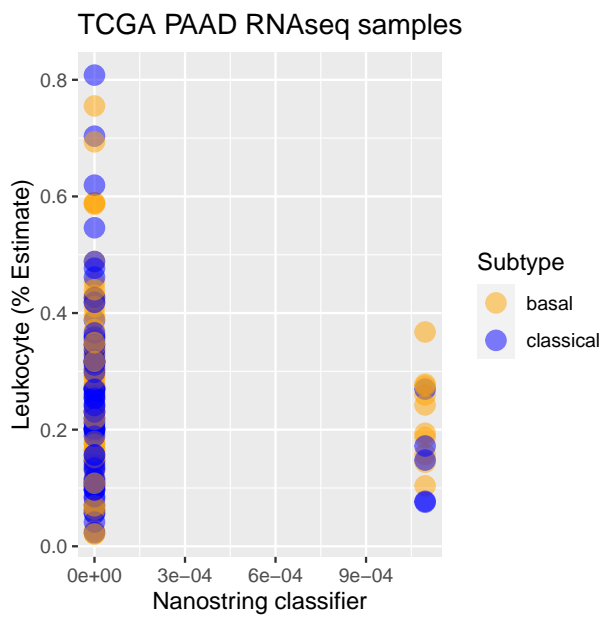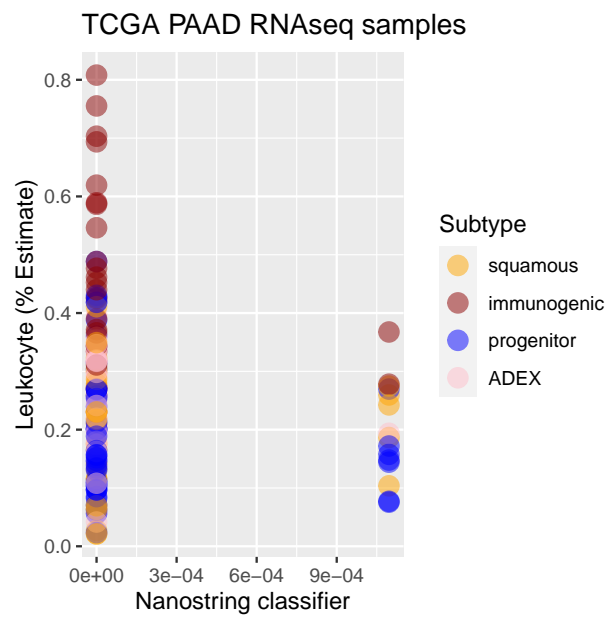## TCGA PAAD RNAseq samples

2

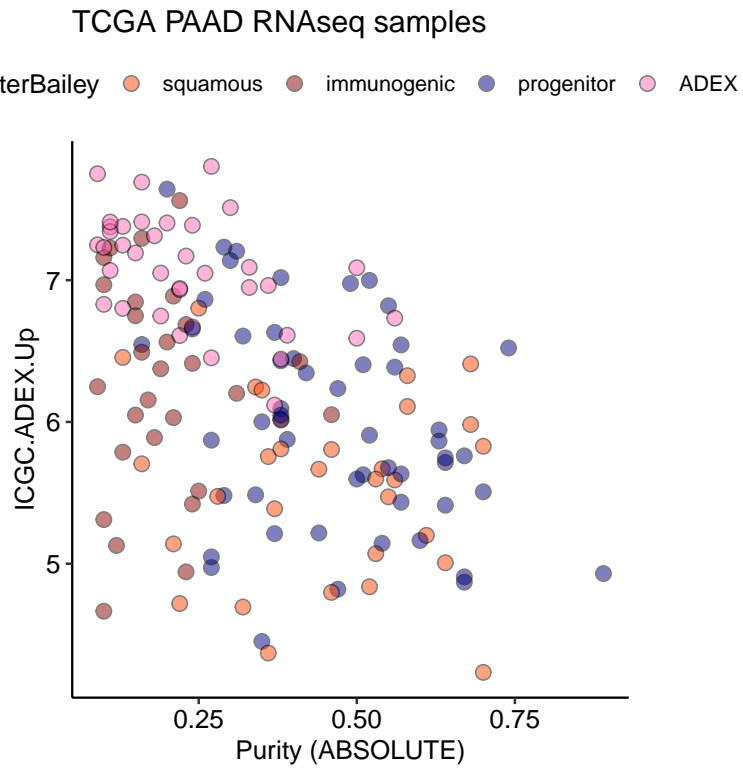# Classifier consistency with basal and classical gene top 25 scores

Tumor classifier and leukocyte percent

```
## `geom_smooth()` using formula 'y ~ x'
## `geom_smooth()` using formula 'y ~ x'
```
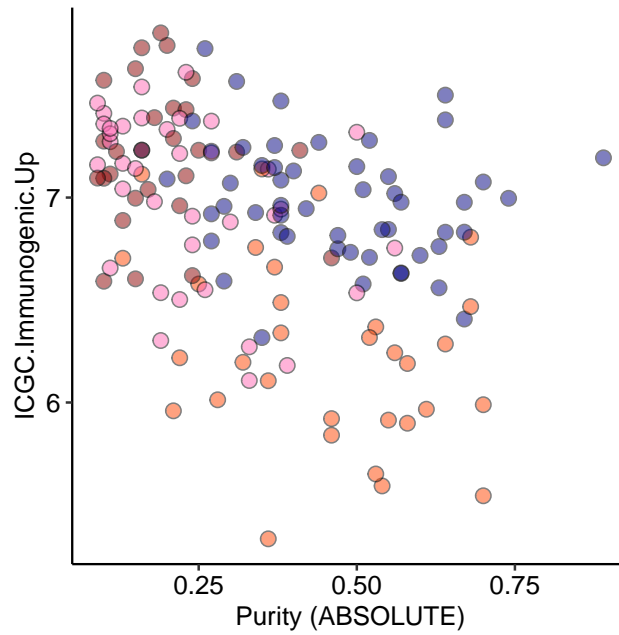
TCGA PAAD RNAseq samples

TCGA PAAD RNAseq samples

Gene expression signatures and ABSOLUTE


```
## [1] -0.4653
## [1] 0
```

TCGA PAAD RNAseq samples
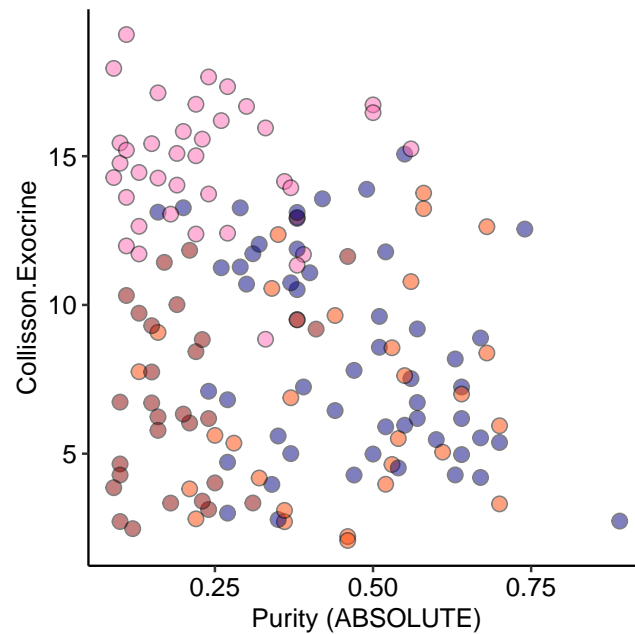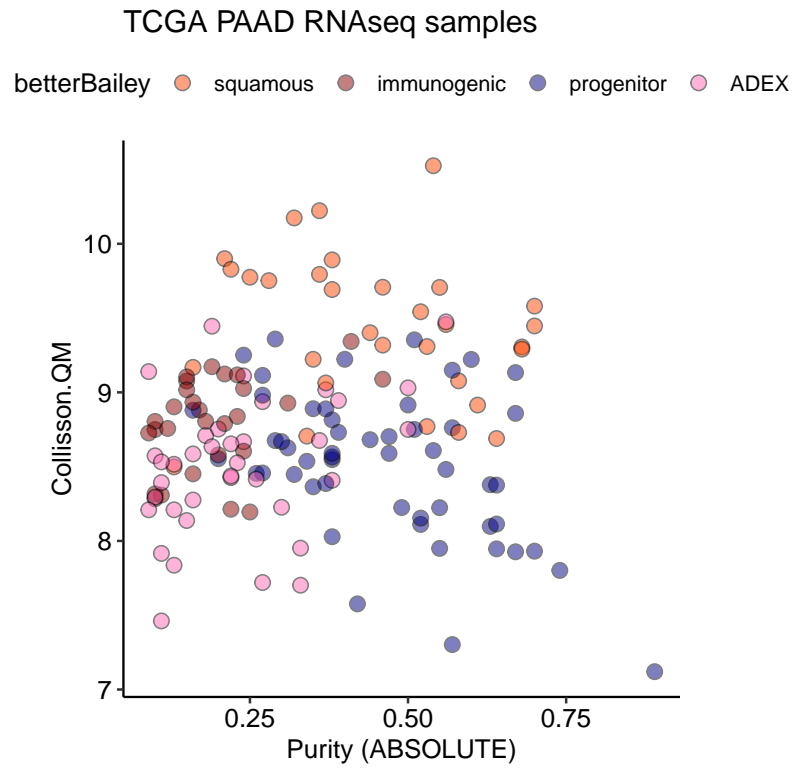
betterBailey ○ squamous ○ immunogenic ○ progenitor ○ ADEX


```
## [1] -0.39961
## [1] 4.4e-07
```

TCGA PAAD RNAseq samples

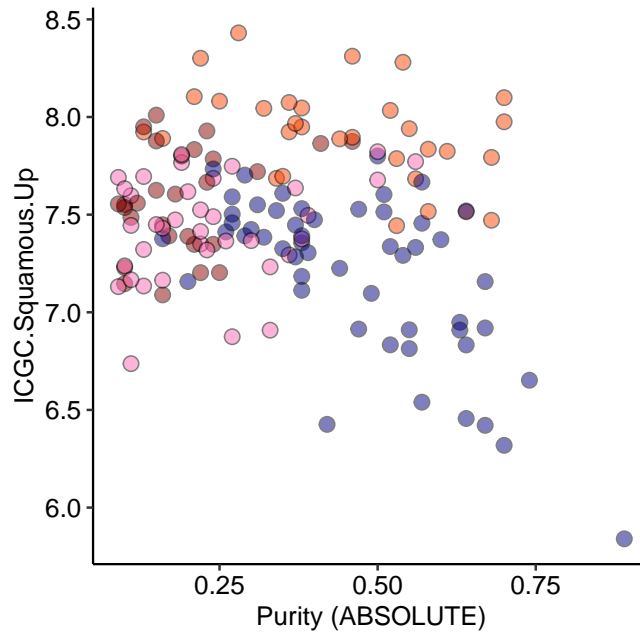betterBailey ○ squamous ○ immunogenic ○ progenitor ○ ADEX

```
## [1] -0.24672
## [1] 0.00241885
```

TCGA PAAD RNAseq samples

betterBailey ● squamous ● immunogenic ● progenitor ● ADEX


```
## [1] 0.02214
## [1] 0.7887321
```

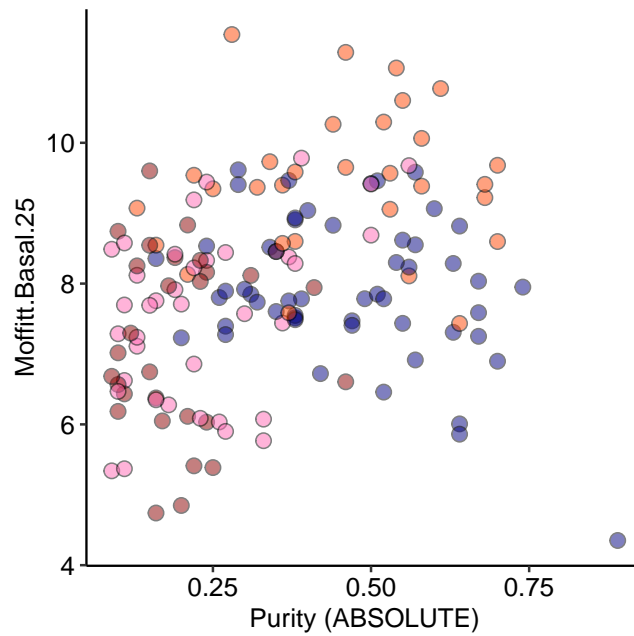## TCGA PAAD RNAseq samples

betterBailey ● squamous ● immunogenic ● progenitor ● ADEX
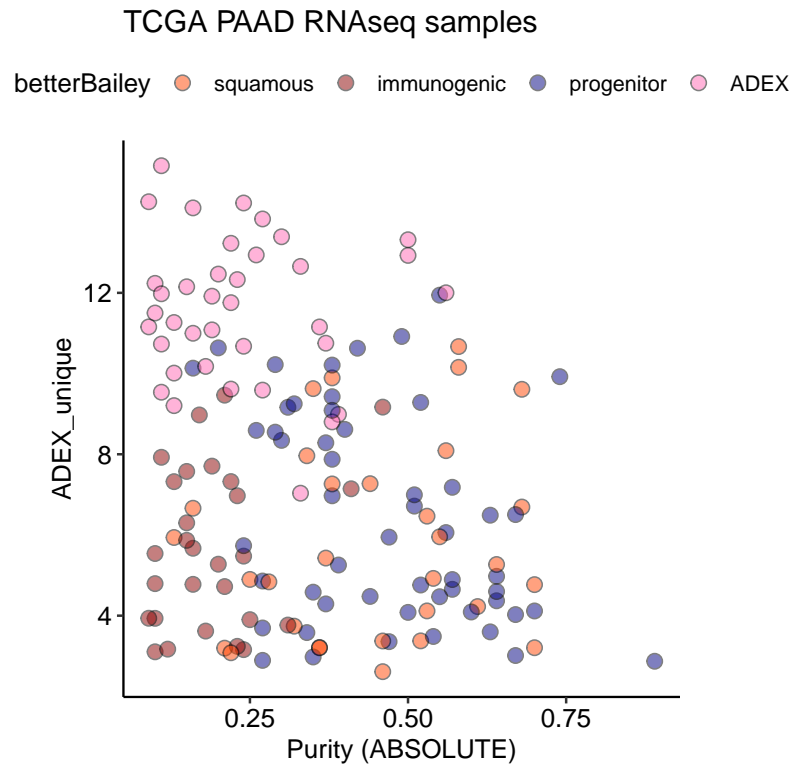


```
## [1] -0.23559
## [1] 0.00382416
```

TCGA PAAD RNAseq samples

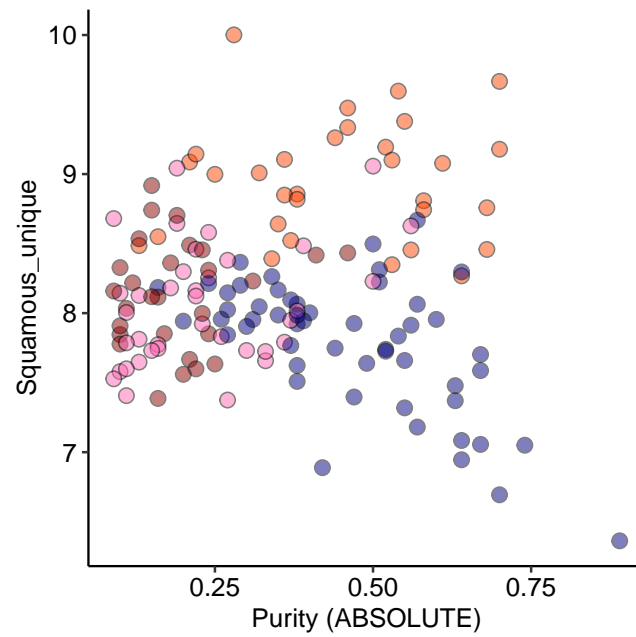betterBailey ● squamous ● immunogenic ● progenitor ● ADEX

```
## [1] 0.26279
## [1] 0.00120413
```

TCGA PAAD RNAseq samples


```
## [1] -0.28683
## [1] 0.00039027
```
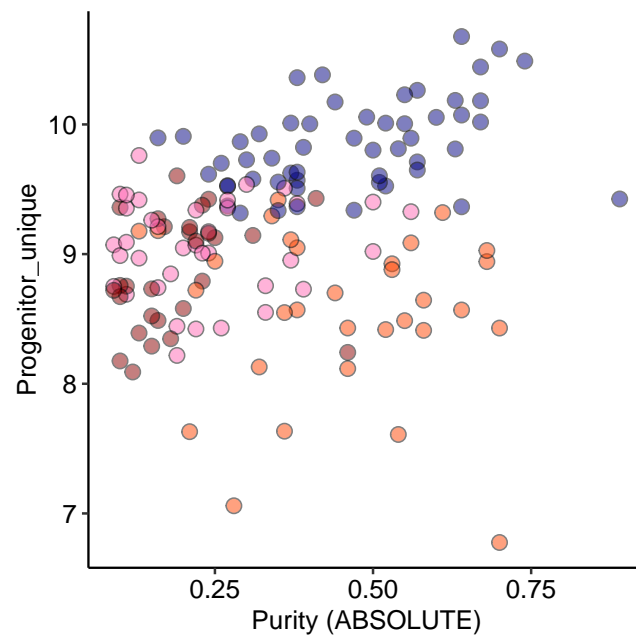
TCGA PAAD RNAseq samples

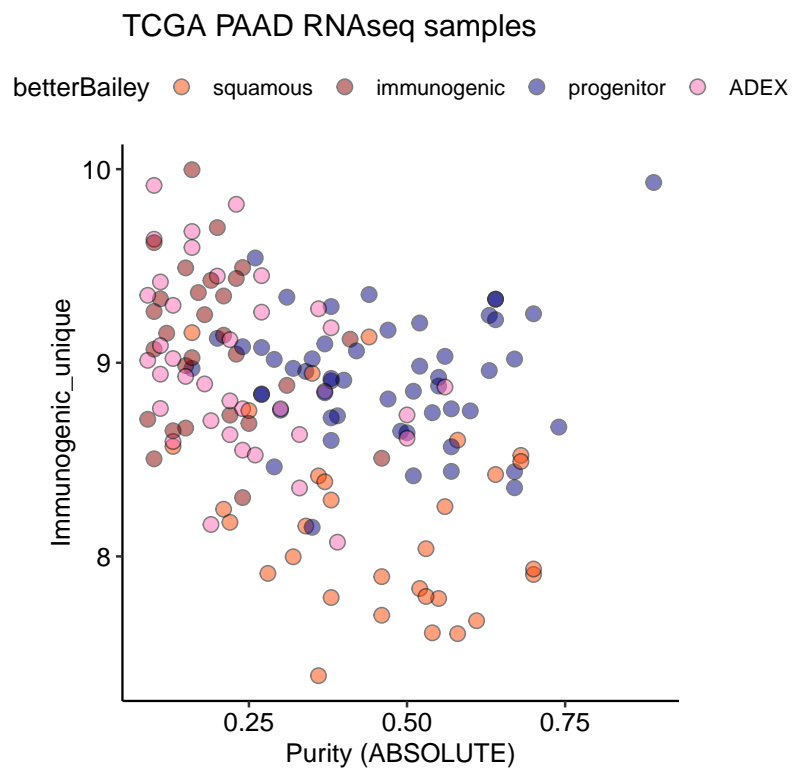betterBailey ● squamous ● immunogenic ● progenitor ● ADEX


```
## [1] -0.04365
## [1] 0.5971286
```

TCGA PAAD RNAseq samples

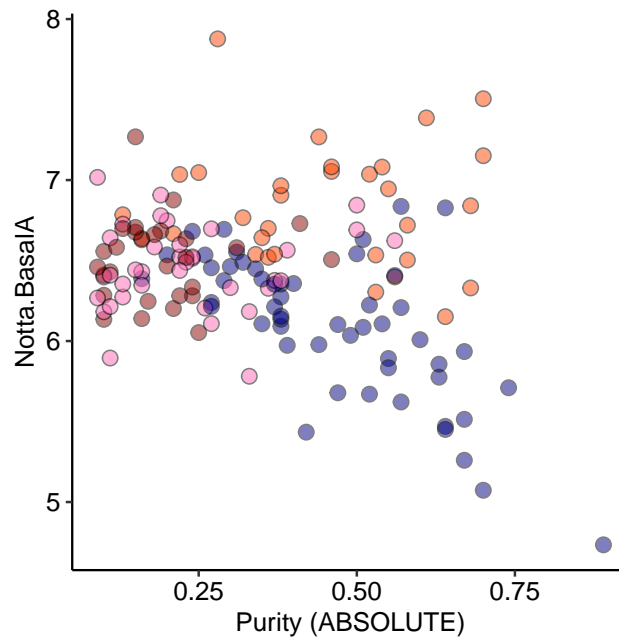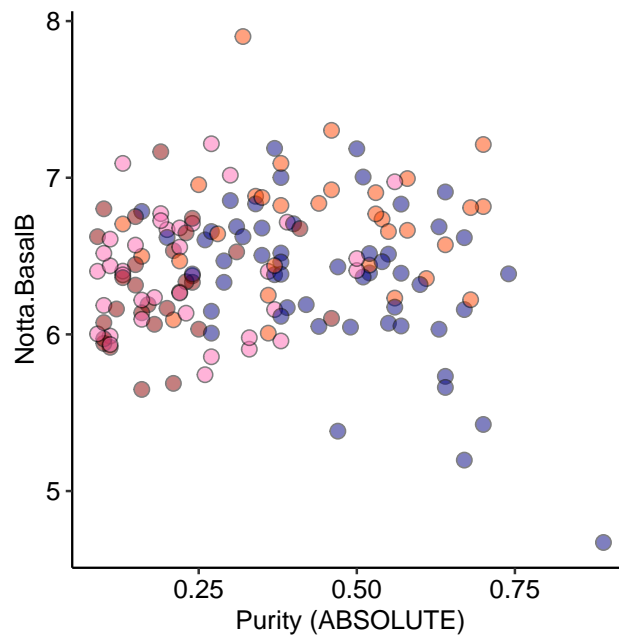betterBailey ● squamous ● immunogenic ● progenitor ● ADEX

```
## [1] 0.28355
## [1] 0.00045791
```

TCGA PAAD RNAseq samples


```
## [1] -0.33341
## [1] 3.253e-05
```

TCGA PAAD RNAseq samples

[1] -0.28578
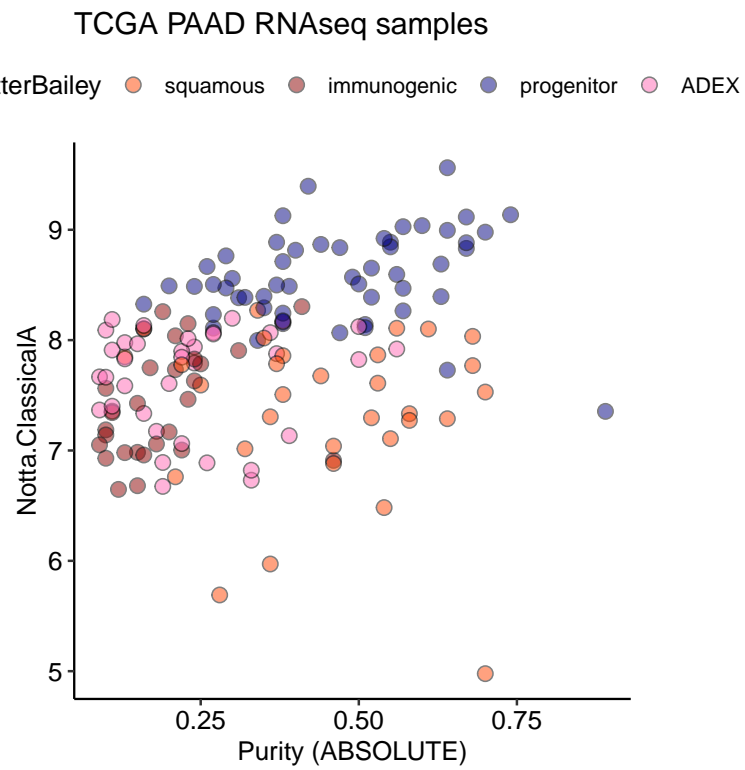## [1] 0.00041095

TCGA PAAD RNAseq samples

```
## [1] -0.0334
## [1] 0.6859157
```

TCGA PAAD RNAseq samples

betterBailey ● squamous ● immunogenic ● progenitor ● ADEX


```
## [1] 0.31296
## [1] 0.00010186
```

TCGA PAAD RNAseq samples

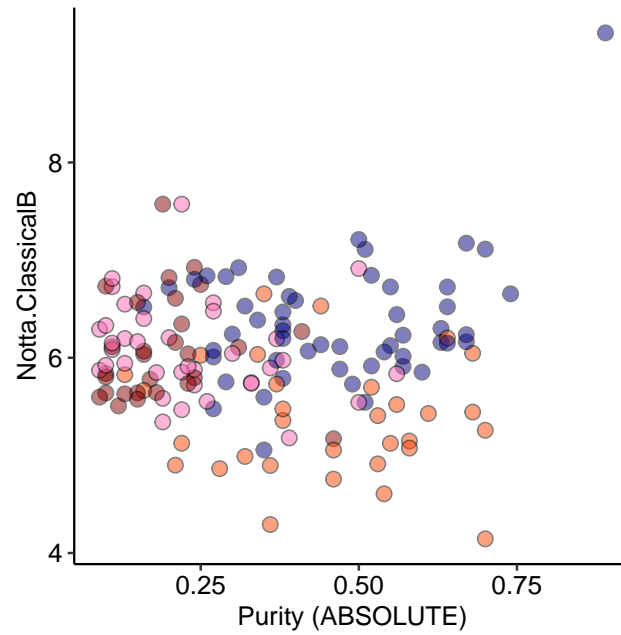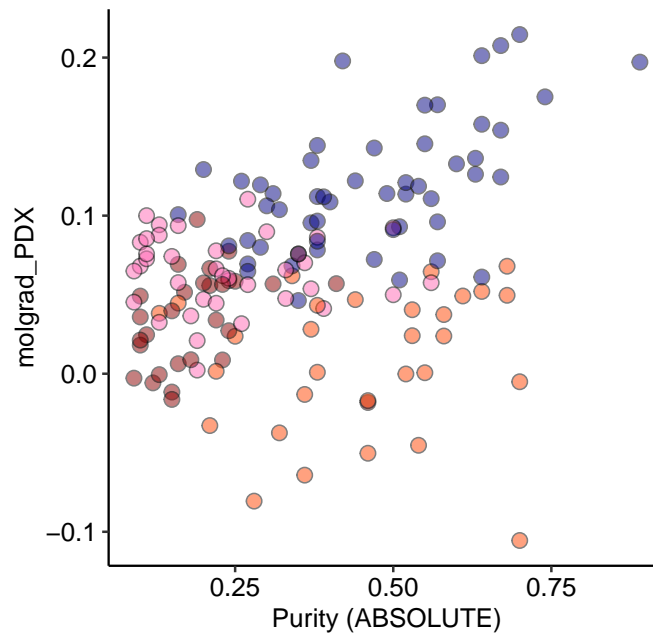betterBailey ● squamous ● immunogenic ● progenitor ● ADEX
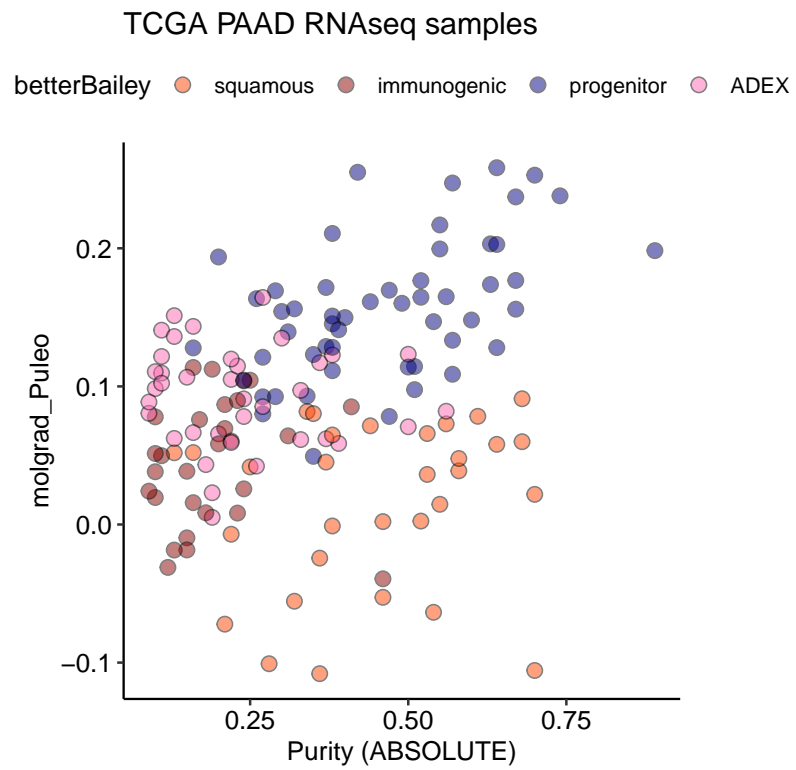


```
## [1] 0.01946
## [1] 0.8138013
```

TCGA PAAD RNAseq samples

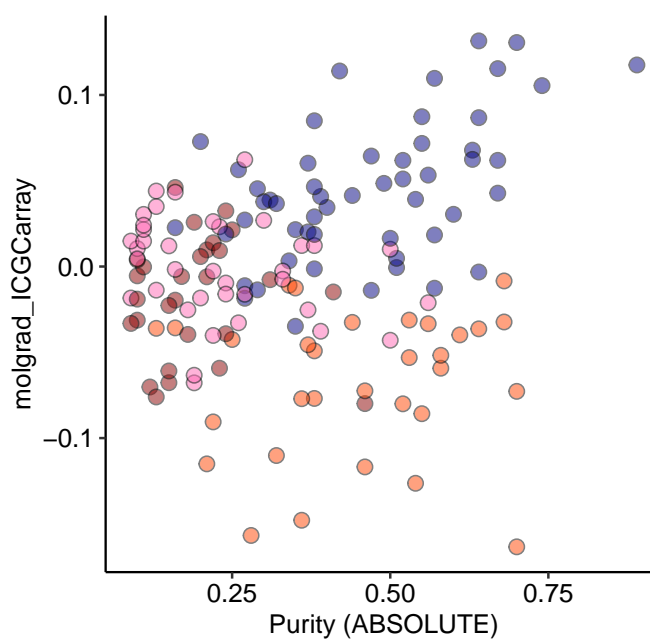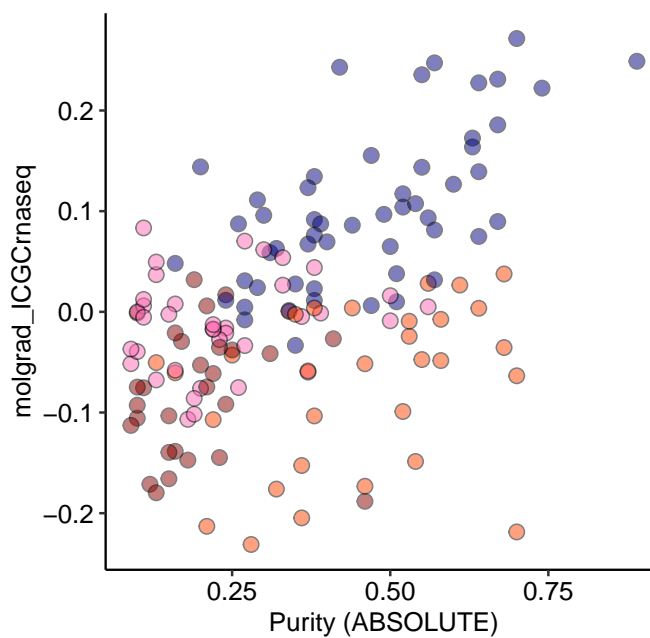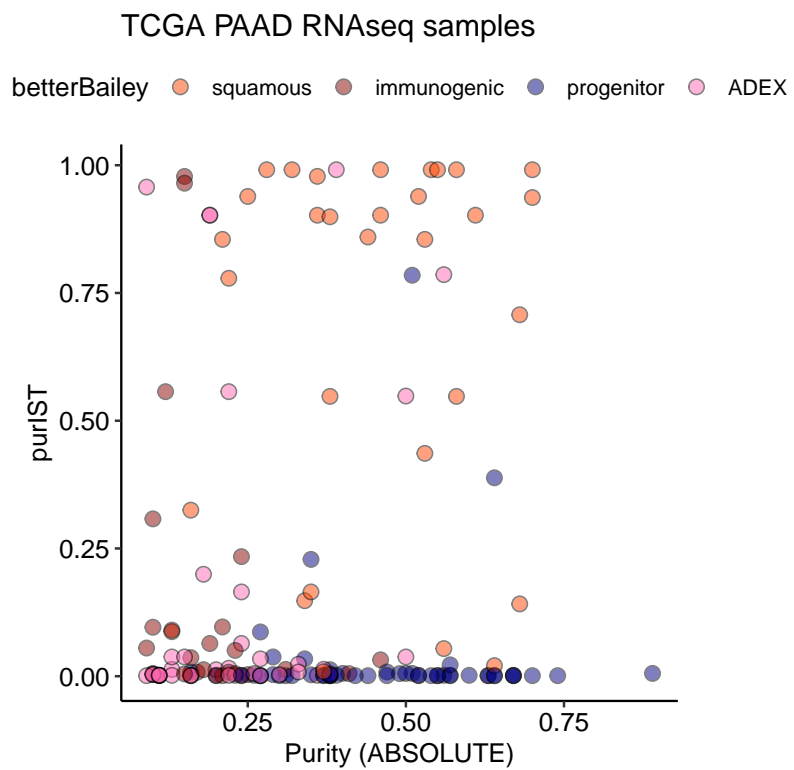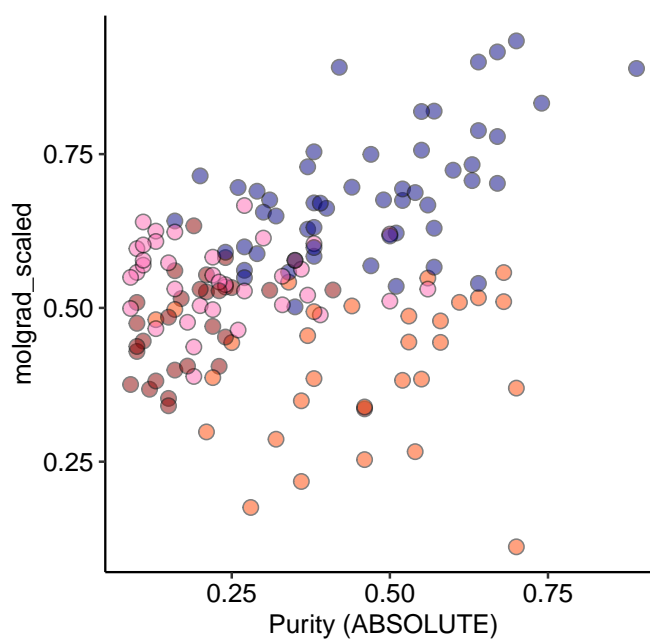betterBailey ● squamous ● immunogenic ● progenitor ● ADEX

```
## [1] 0.32931
## [1] 4.116e-05
```

TCGA PAAD RNAseq samples


```
## [1] 0.30058
## [1] 0.00019559
```

TCGA PAAD RNAseq samples


```
## [1] 0.18857
## [1] 0.02127291
```

TCGA PAAD RNAseq samples

```
## [1] 0.48297
## [1] 0
```

TCGA PAAD RNAseq samples


```
## [1] 0.12816
## [1] 0.1193119
```
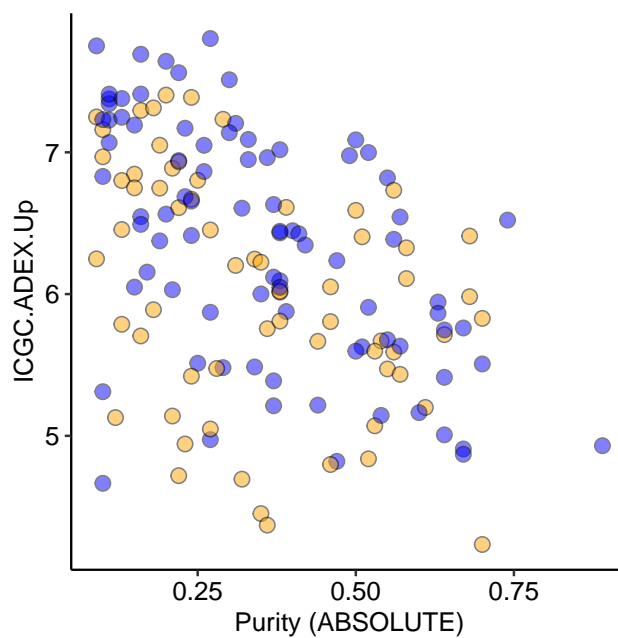
TCGA PAAD RNAseq samples
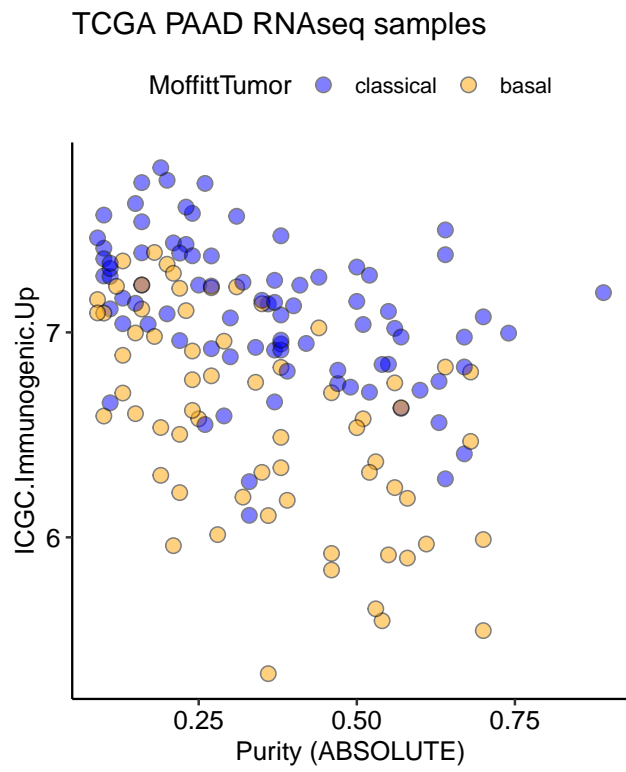
betterBailey ● squamous ● immunogenic ● progenitor ● ADEX


```
## [1] 0.32931
## [1] 4.116e-05
```
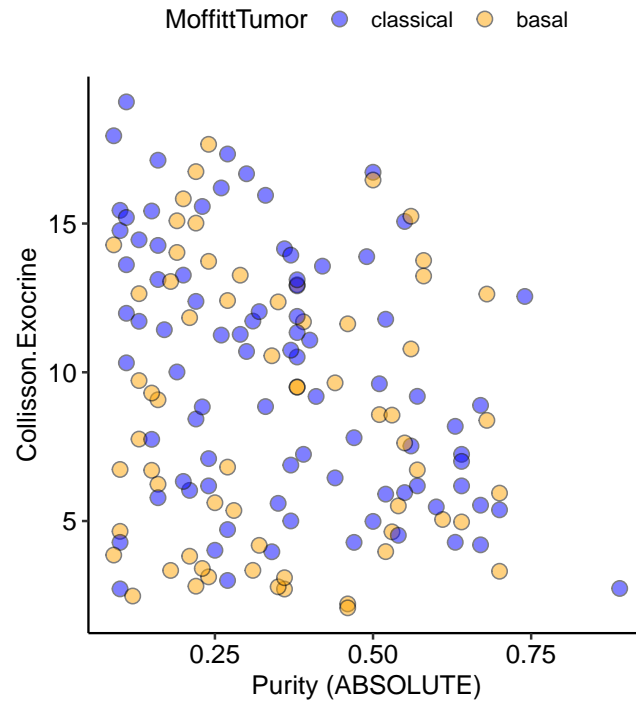
TCGA PAAD RNAseq samples

MoffittTumor ● classical ● basal

```
## [1] -0.4653
## [1] 0
```

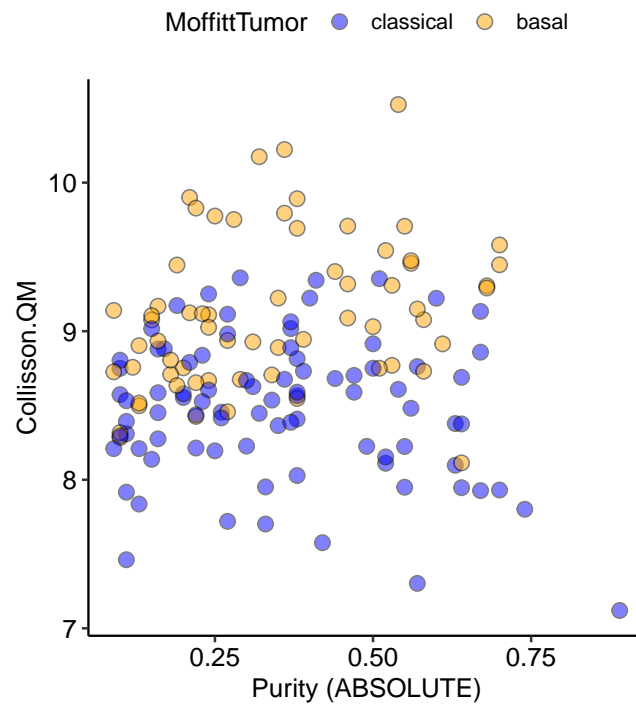## TCGA PAAD RNAseq samples


```
## [1] -0.39961
## [1] 4.4e-07
```

TCGA PAAD RNAseq samples


```
## [1] -0.24672
## [1] 0.00241885
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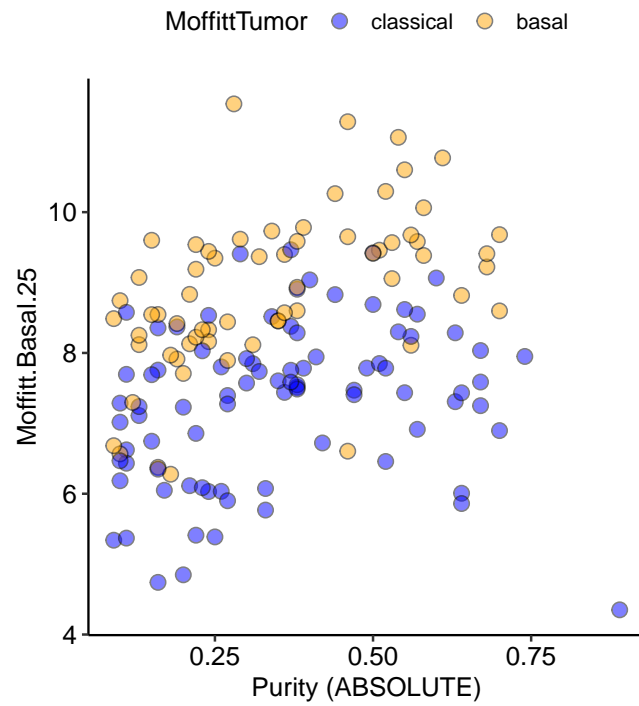
TCGA PAAD RNAseq samples

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## [1] 0.02214
## [1] 0.7887321
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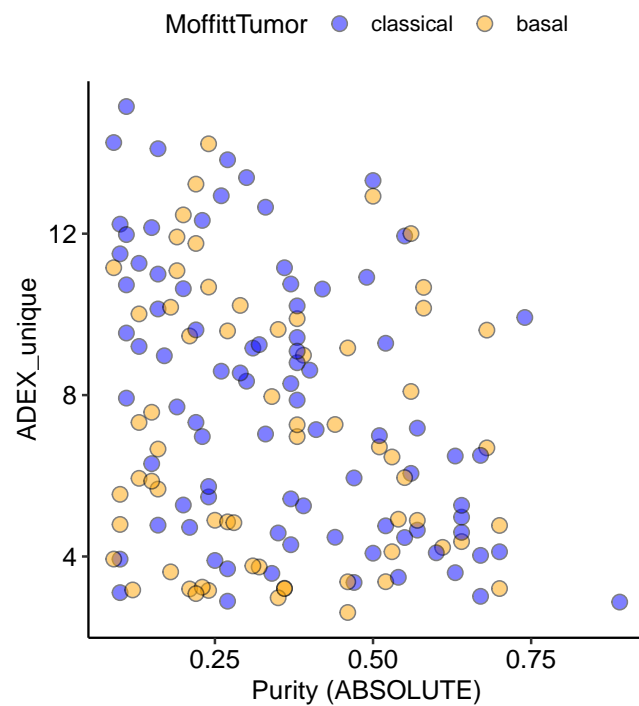# TCGA PAAD RNAseq samples

MoffittTumor ● classical ● basal


```
## [1] -0.23559
## [1] 0.00382416
```
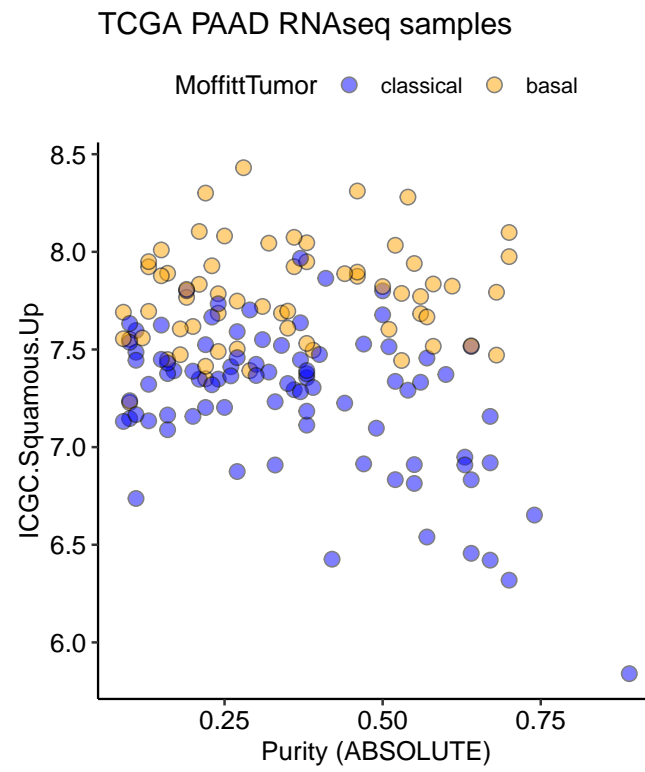
TCGA PAAD RNAseq samples


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## [1] 0.00120413
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TCGA PAAD RNAseq samples

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## [1] 0.00039027
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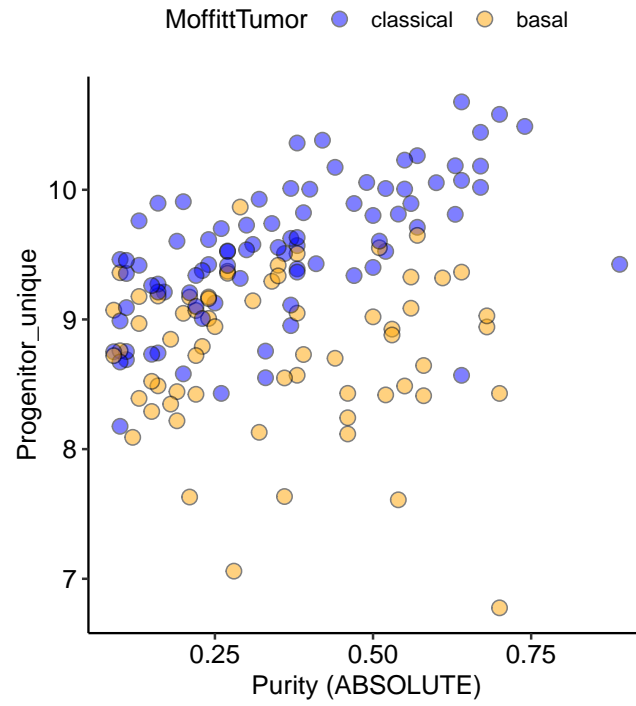
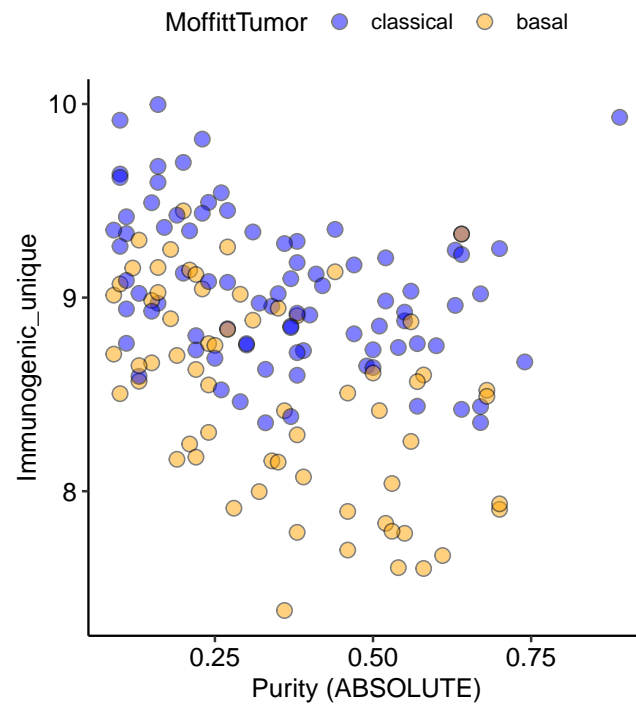## TCGA PAAD RNAseq samples


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## [1] -0.04365
## [1] 0.5971286
```
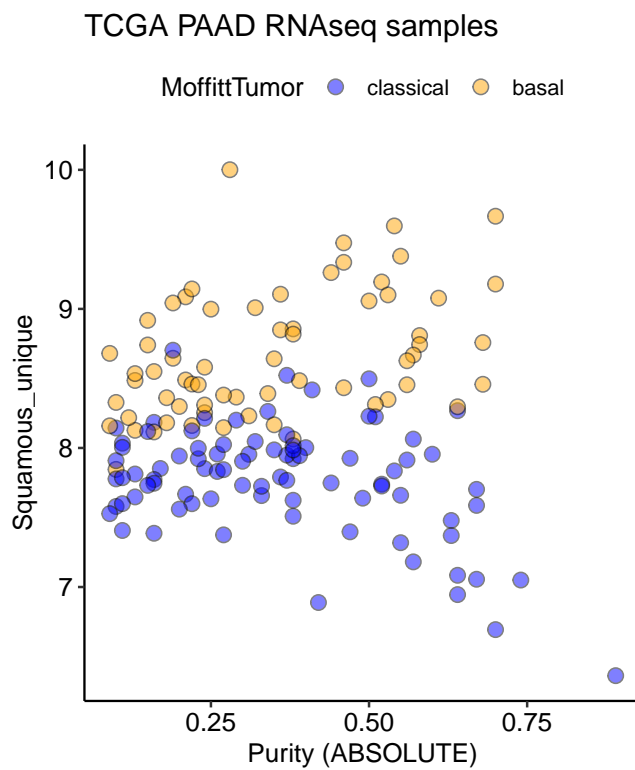
TCGA PAAD RNAseq samples


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## [1] 0.28355
## [1] 0.00045791
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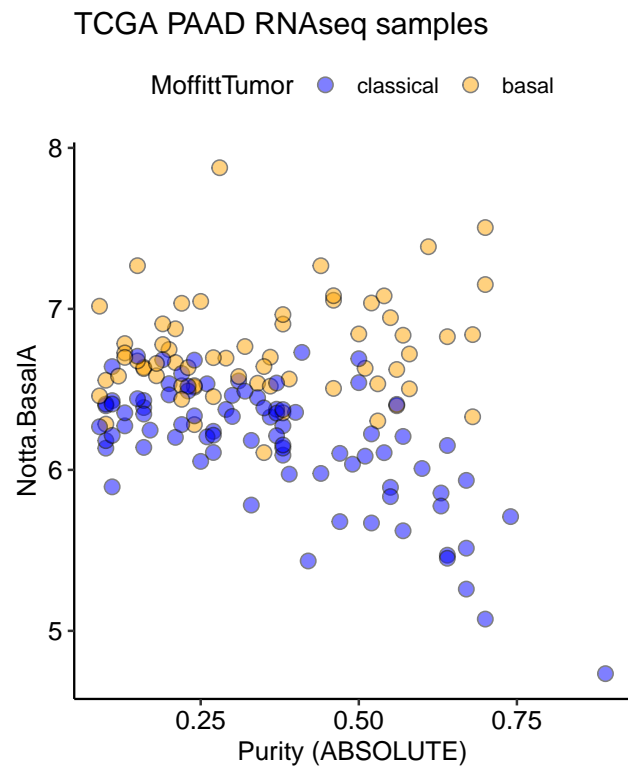
TCGA PAAD RNAseq samples

```
## [1] -0.33341
## [1] 3.253e-05
```
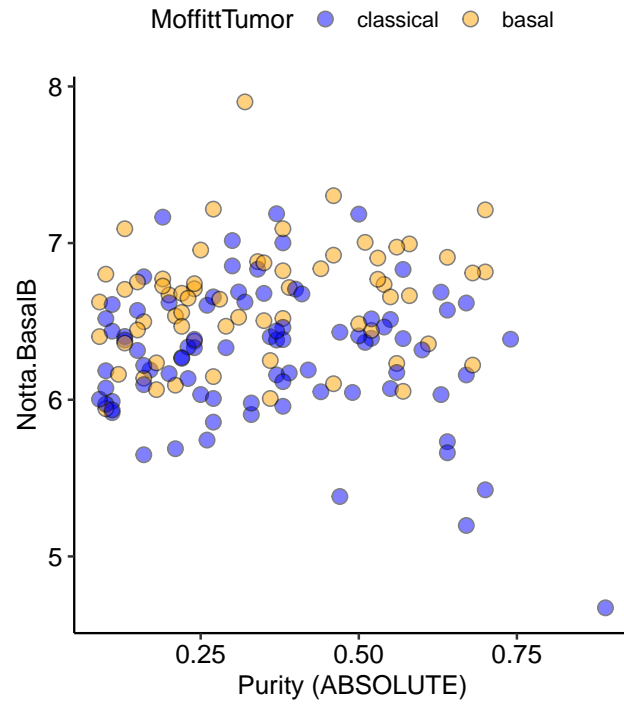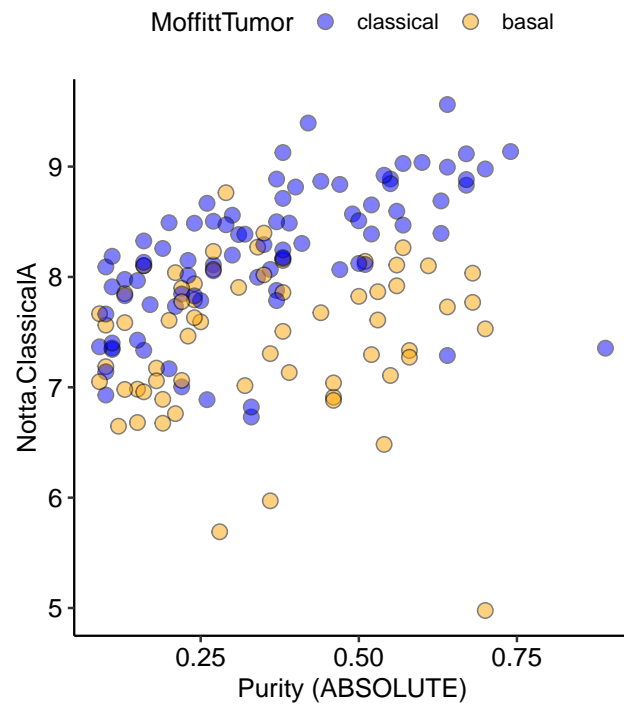
TCGA PAAD RNAseq samples


```
## [1] -0.28578
## [1] 0.00041095
```

TCGA PAAD RNAseq samples


```
## [1] -0.0334
## [1] 0.6859157
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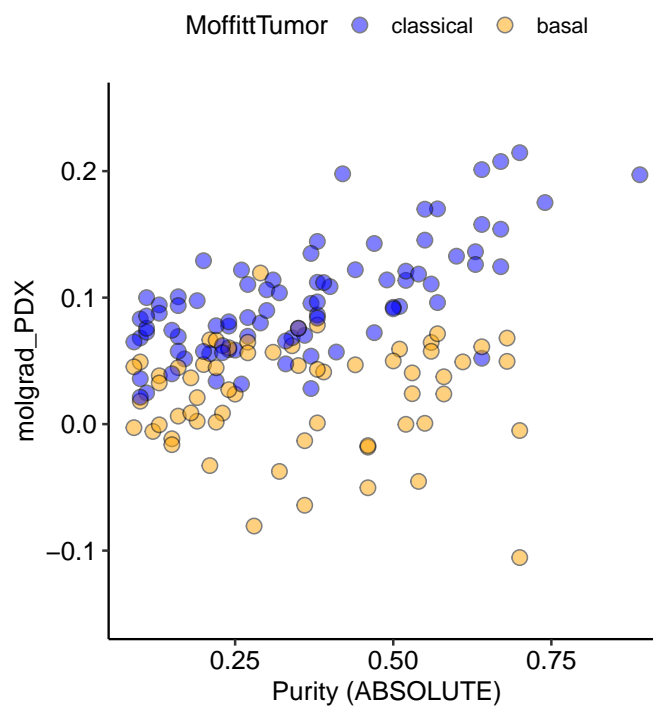
TCGA PAAD RNAseq samples

```
## [1] 0.31296
## [1] 0.00010186
```
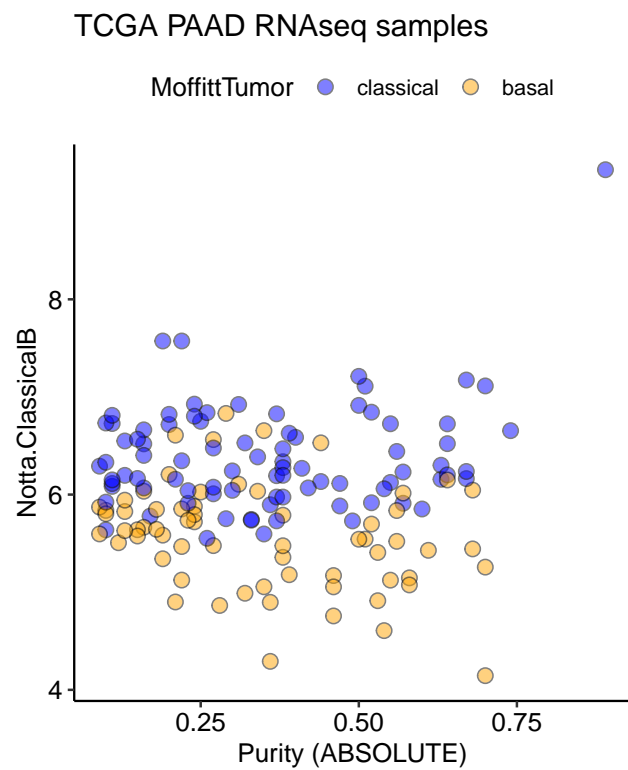
TCGA PAAD RNAseq samples
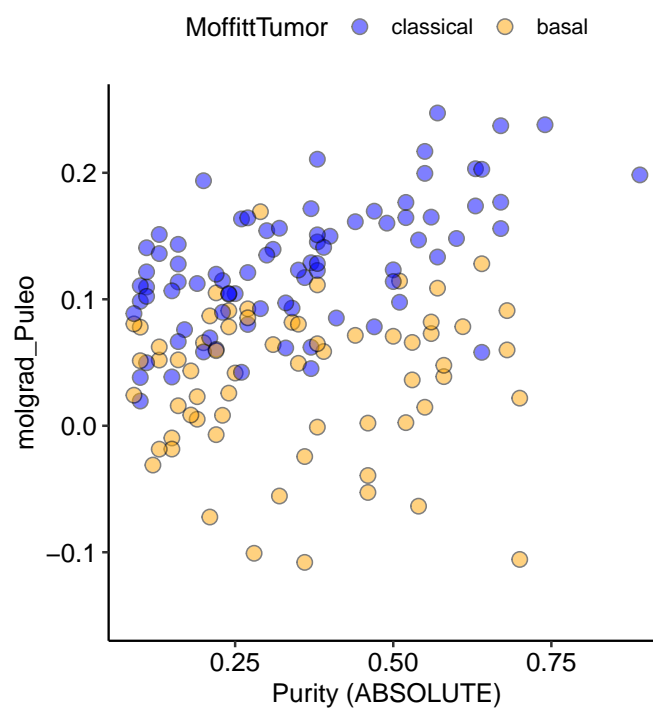


```
## [1] 0.01946
## [1] 0.8138013
```

TCGA PAAD RNAseq samples

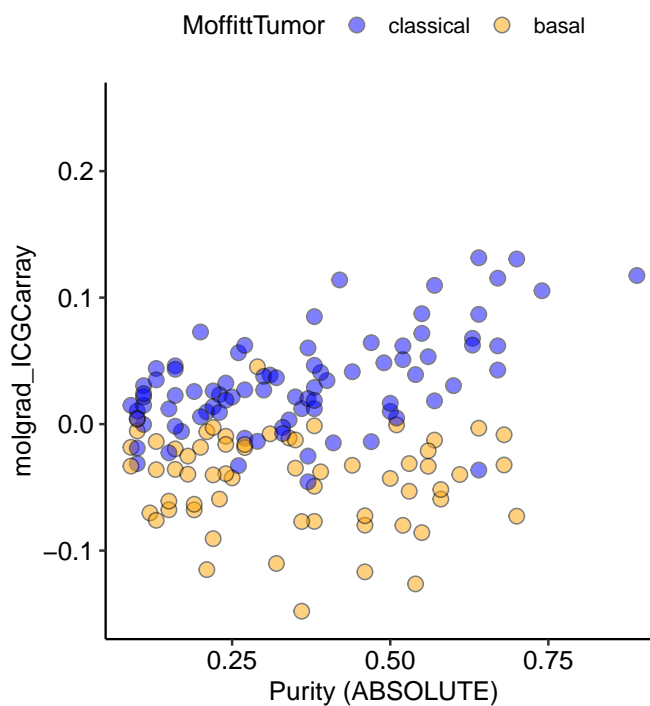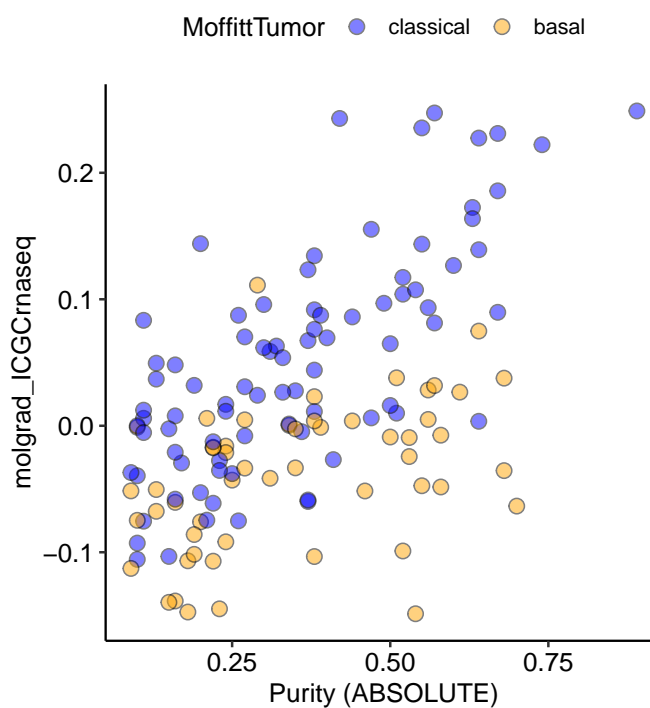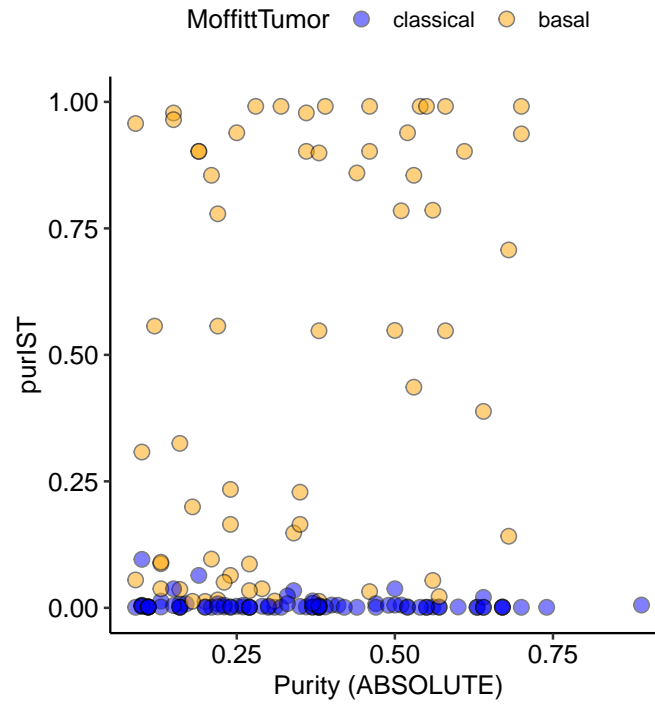TCGA PAAD RNAseq samples

TCGA PAAD RNAseq samples

TCGA PAAD RNAseq samples
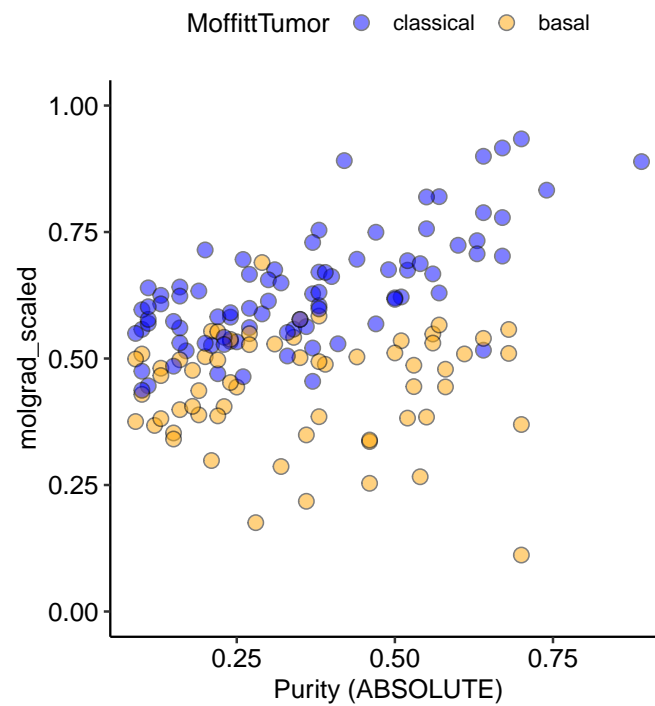
TCGA PAAD RNAseq samples

TCGA PAAD RNAseq samples

PDL1 expression

TCGA PAAD RNAseq samples