

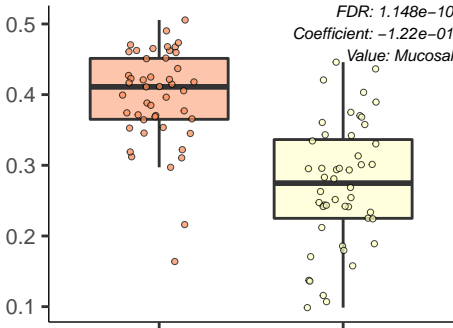
PWY.5695

Luminal (n=47)

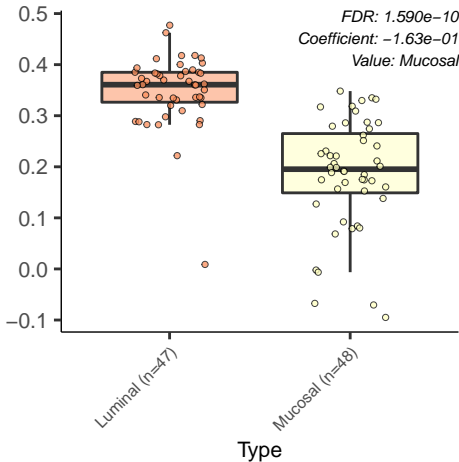
Mucosal (n=48)

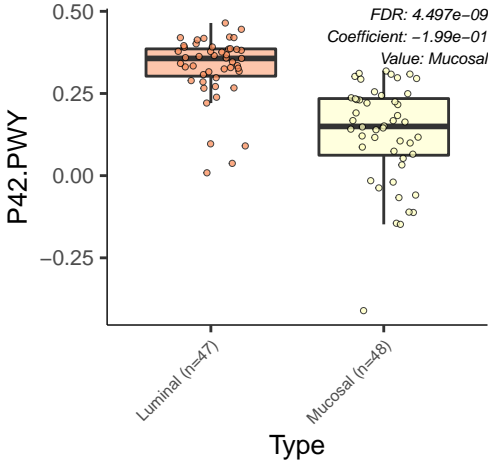
Type

*FDR: 1.148e-10*  
*Coefficient: -1.22e-01*  
*Value: Mucosal*



FERMENTATION.PWY





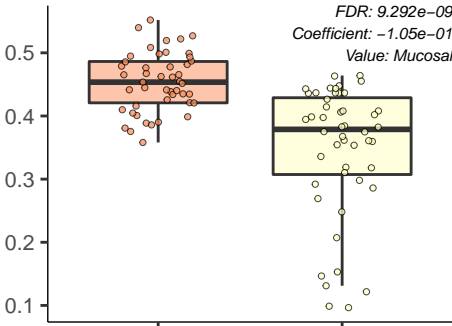
GLUCONEO.PWY

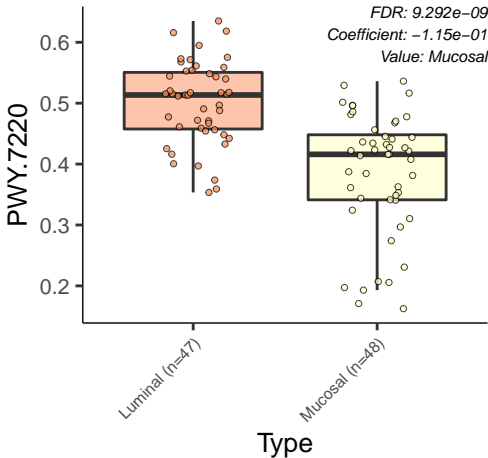
Luminal (n=47)

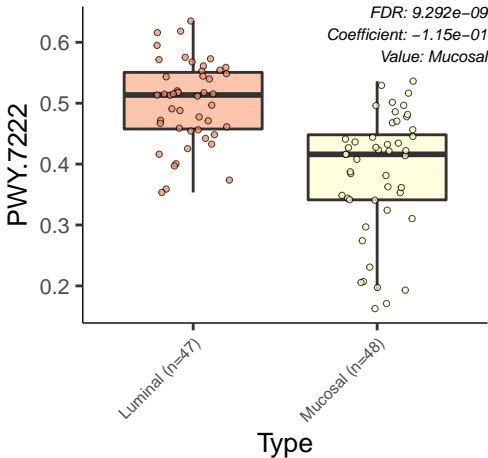
Mucosal (n=48)

Type

*FDR: 9.292e-09*  
*Coefficient: -1.05e-01*  
*Value: Mucosal*







FASYN.ELONG.PWY

*FDR: 4.518e-08*

*Coefficient: -1.25e-01*

*Value: Mucosal*

0.4

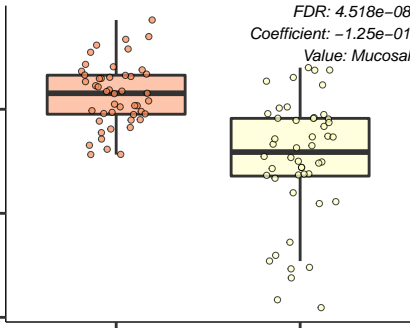
0.2

0.0

Luminal (n=47)

Mucosal (n=48)

Type



P108.PWY

FDR: 4.518e-08

Coefficient: -3.05e-01

Value: Mucosal

0.0

-0.5

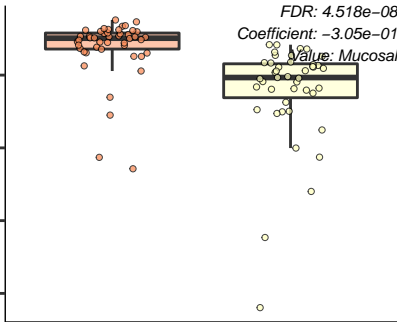
-1.0

-1.5

Luminal (n=47)

Mucosal (n=48)

Type





POLYISOPRENSYN.PWY

*FDR: 5.000e-08*

*Coefficient: -1.51e-01*

*Value: Mucosal*

0.4

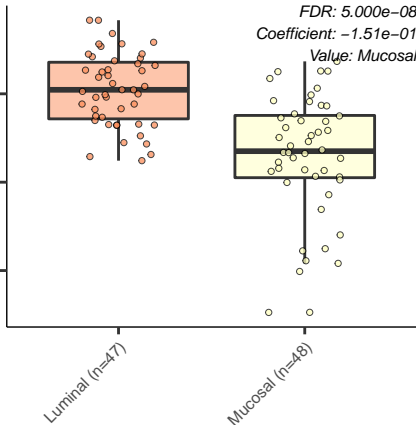
0.2

0.0

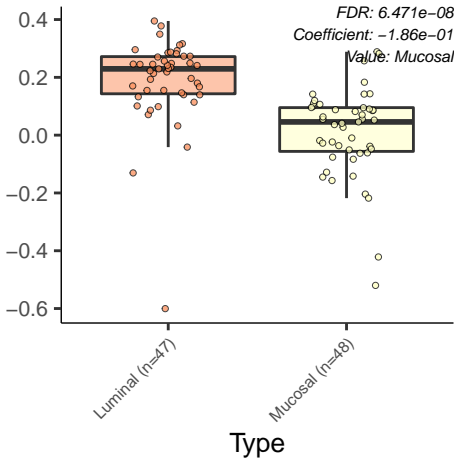
Luminal (n=47)

Mucosal (n=48)

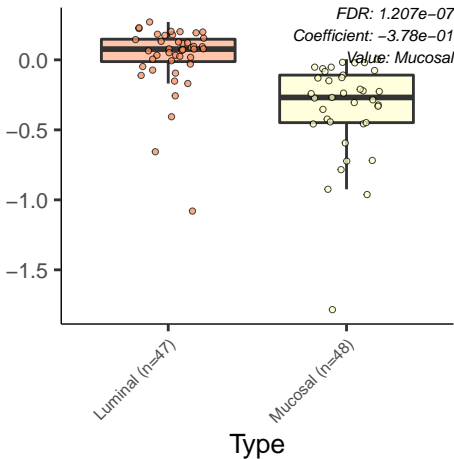
Type



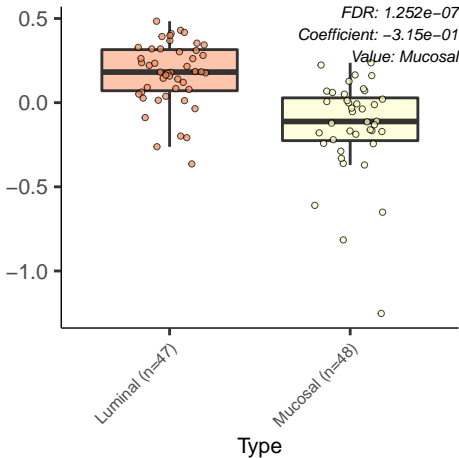
PRPP.PWY



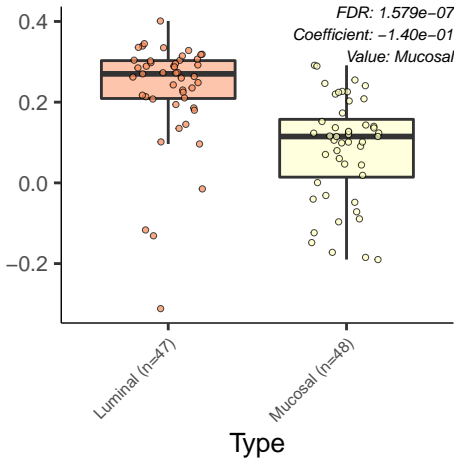
PWY.6467



TEICHOICACID.PWY



PWY.6969



PWY0.166

Luminal (n=47)

Mucosal (n=48)

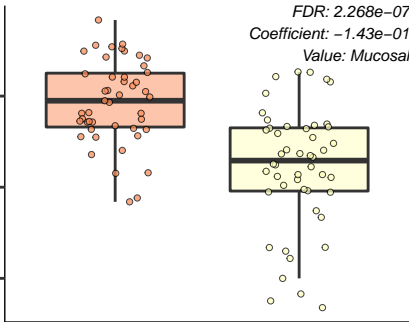
Type

*FDR: 2.268e-07*  
*Coefficient: -1.43e-01*  
*Value: Mucosal*

0.4

0.2

0.0



PWY.7187

Luminal (n=47)

Mucosal (n=48)

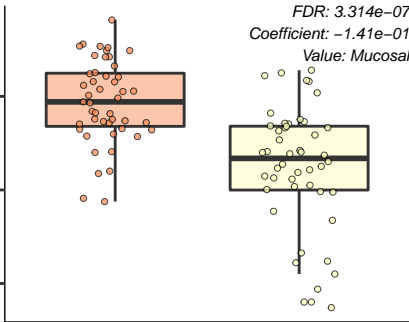
Type

FDR:  $3.314e-07$   
Coefficient:  $-1.41e-01$   
Value: Mucosal

0.4

0.2

0.0



PWY.5484

Luminal (n=47)

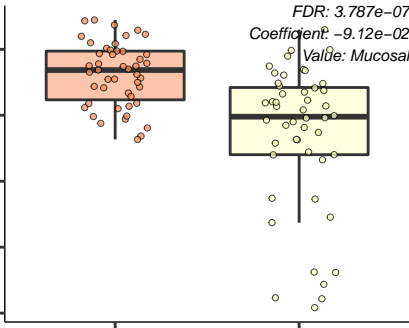
Mucosal (n=48)

Type

*FDR: 3.787e-07*

*Coefficient: -9.12e-02*

*Value: Mucosal*





DENOVOPURINE2.PWY

*FDR: 1.695e-06*

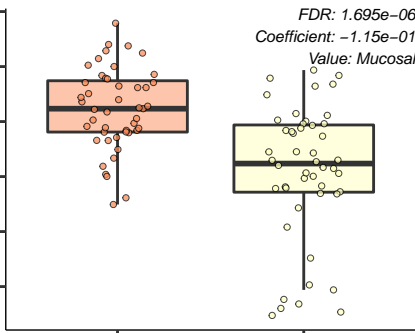
*Coefficient: -1.15e-01*

*Value: Mucosal*

Luminal (n=47)

Mucosal (n=48)

Type



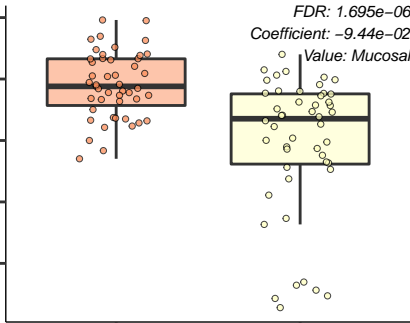
PWY.6126

Luminal (n=47)

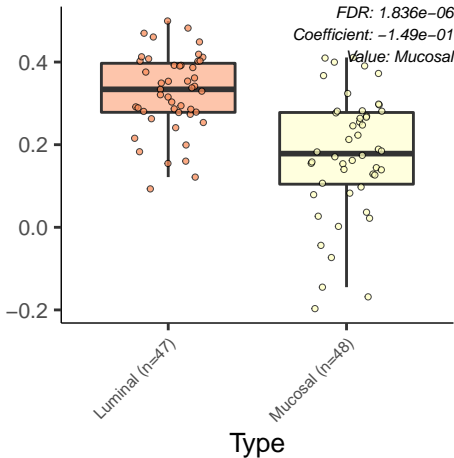
Mucosal (n=48)

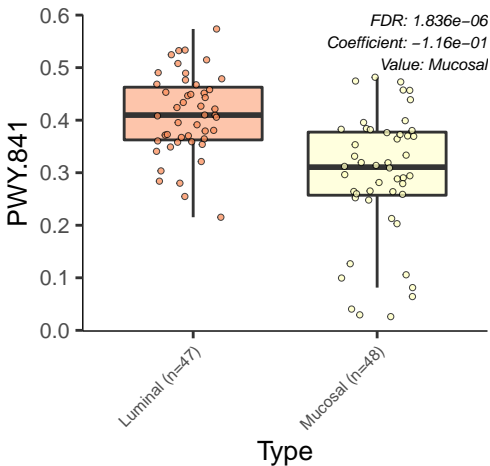
Type

FDR:  $1.695e-06$   
Coefficient:  $-9.44e-02$   
Value: Mucosal

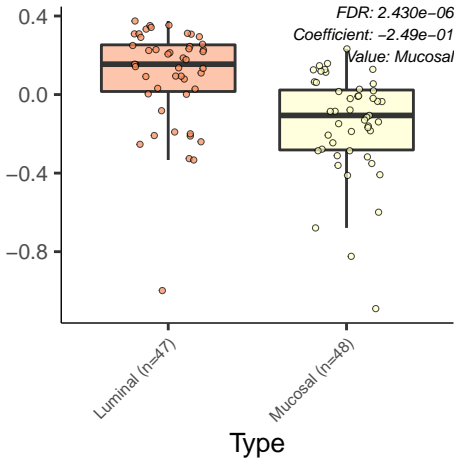


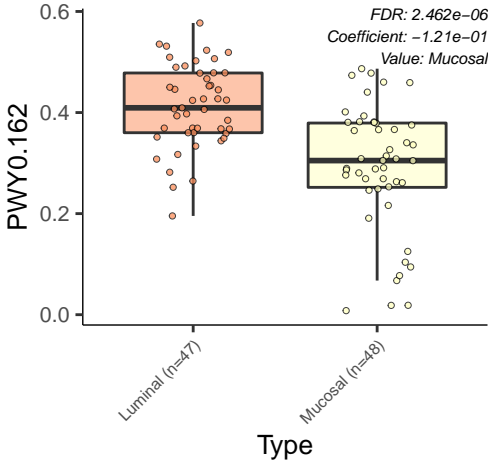
PWY.7200

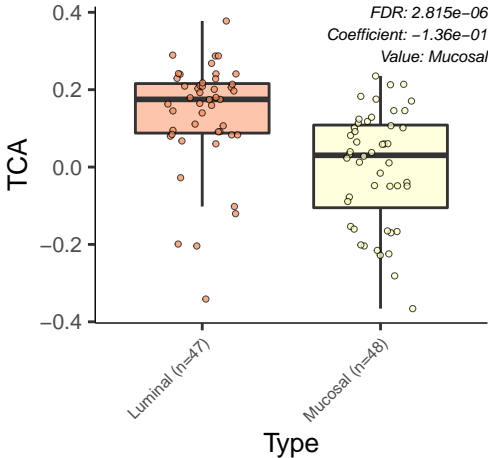




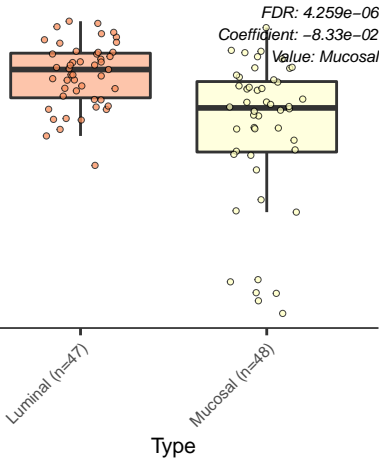
PWY.5913







ANAEROFRUCAT.PWY





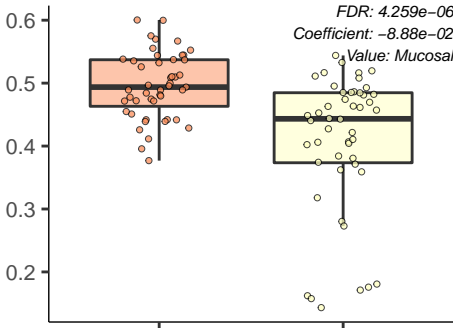
PWY.7229

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $4.259 \times 10^{-6}$   
Coefficient:  $-8.88 \times 10^{-2}$   
Value: Mucosal



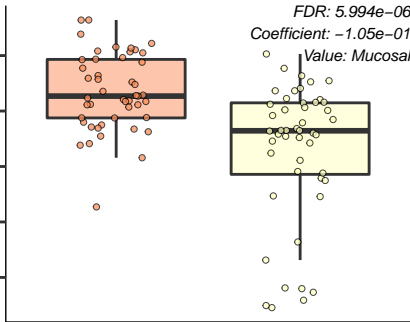
UDPNAGSYN.PWY

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $5.994e-06$   
Coefficient:  $-1.05e-01$   
Value: Mucosal



NAGLIPASYN.PWY

FDR: 6.561e-06

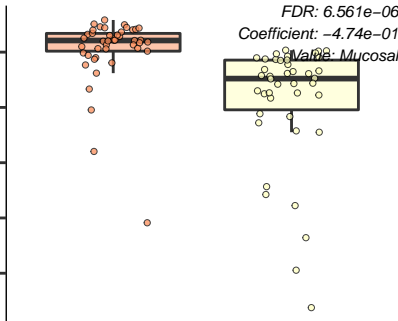
Coefficient: -4.74e-01

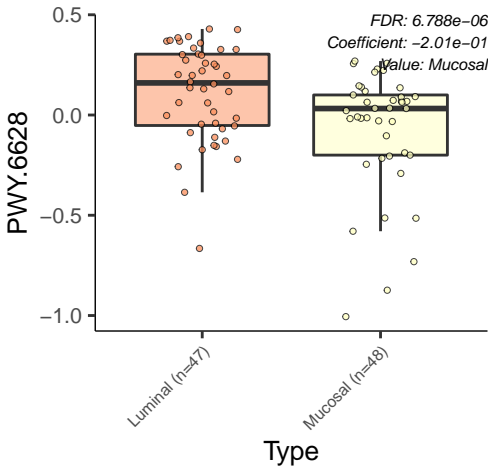
Value: Mucosal

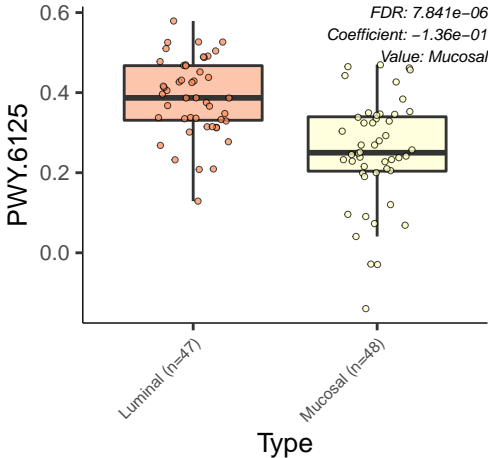
Luminal (n=47)

Mucosal (n=48)

Type







PWY.6630

FDR:  $7.841e-06$

Coefficient:  $-1.99e-01$

Value: Mucosal

0.0

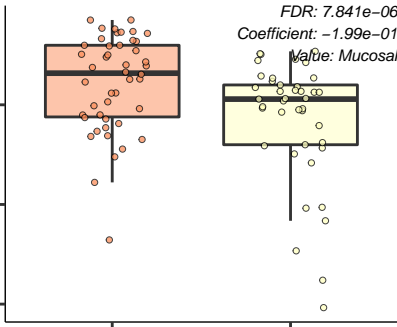
-0.5

-1.0

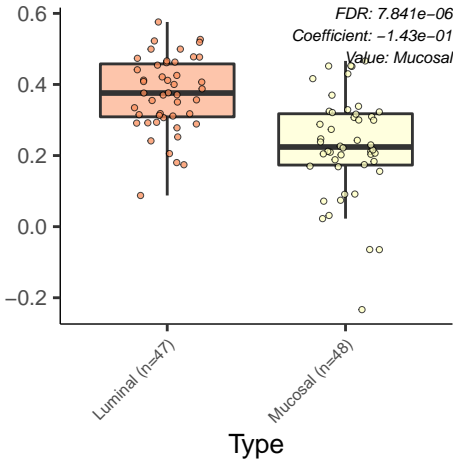
Luminal (n=47)

Mucosal (n=48)

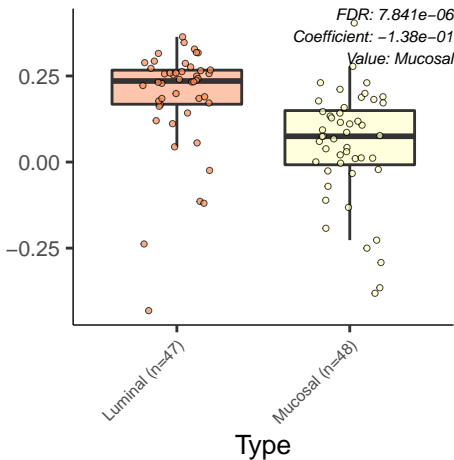
Type



PWY.7228

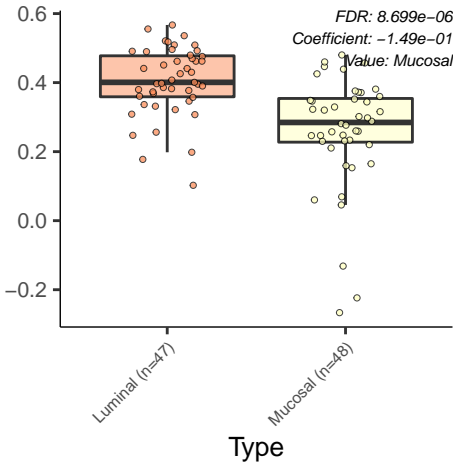


PWY.7323





PWY.2941



PWY.7196

0.4

0.2

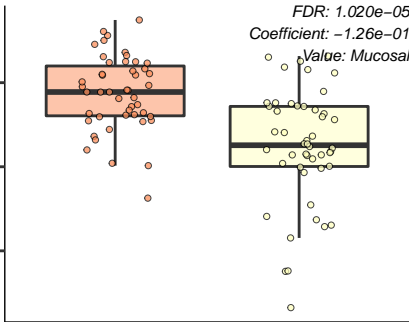
0.0

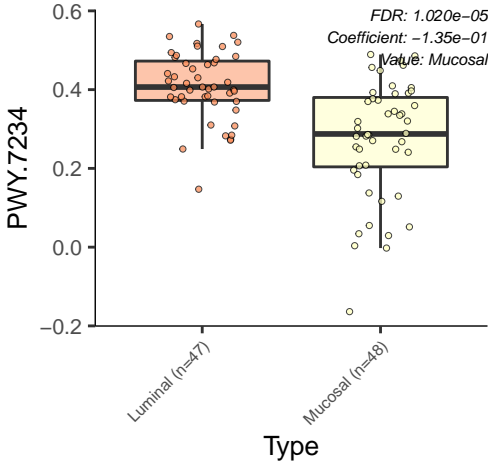
Luminal (n=47)

Mucosal (n=48)

Type

*FDR: 1.020e-05*  
*Coefficient: -1.26e-01*  
*Value: Mucosal*





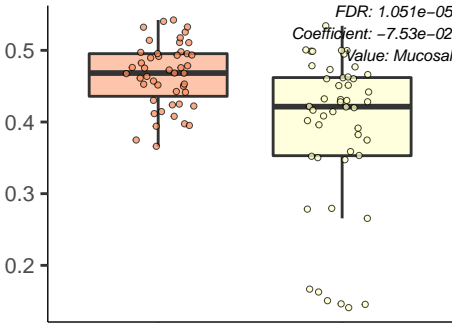
GLYCOLYSIS

Luminal (n=47)

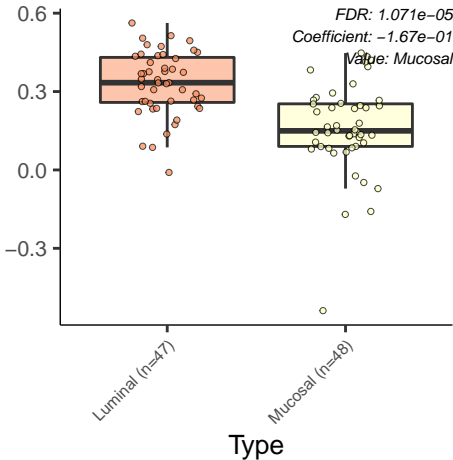
Mucosal (n=48)

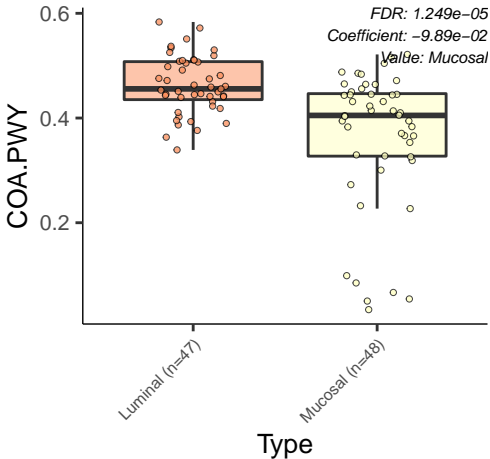
Type

FDR:  $1.051e-05$   
Coefficient:  $-7.53e-02$   
Value: Mucosal

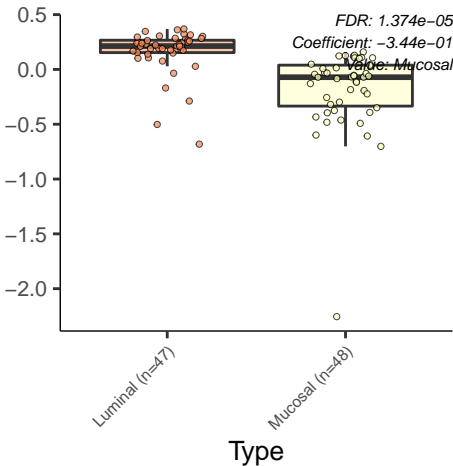


PWY.7184

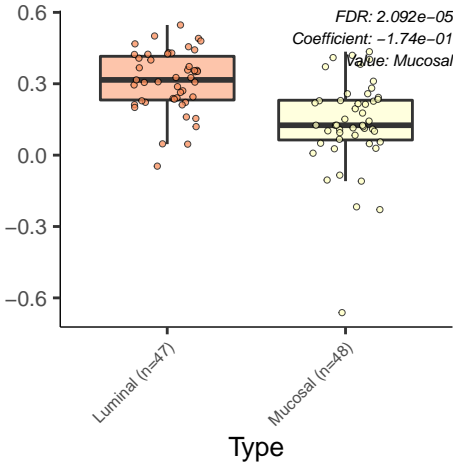




PWY.5154

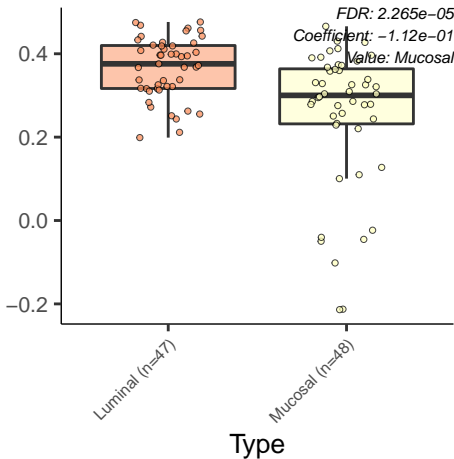


PWY.7197

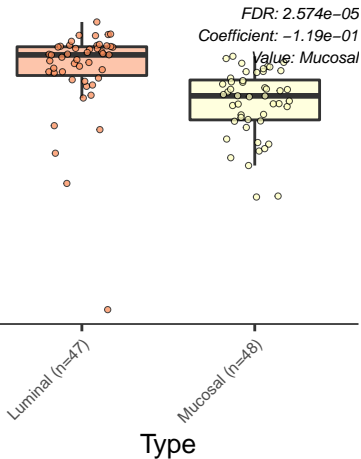




PWY.7392



COLANSYN.PWY



PWY.7211

*FDR: 2.675e-05*

*Coefficient: -3.13e-01*

*Value: Mucosal*

0.0

-0.5

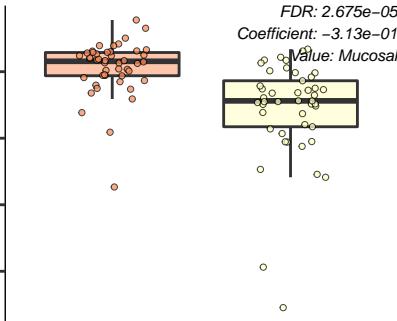
-1.0

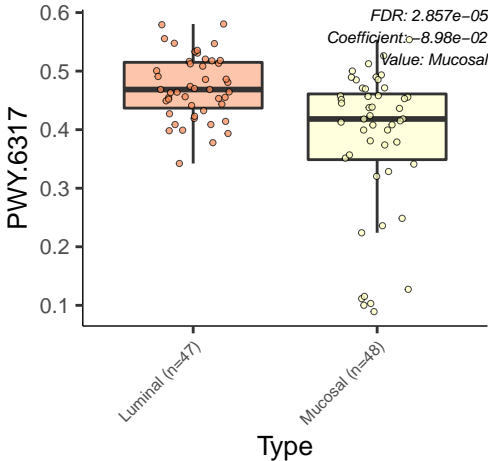
-1.5

Luminal (n=47)

Mucosal (n=48)

Type





PWY.6151

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $3.384e-05$

Coefficient:  $-9.62e-02$

Value: Mucosal

0.5

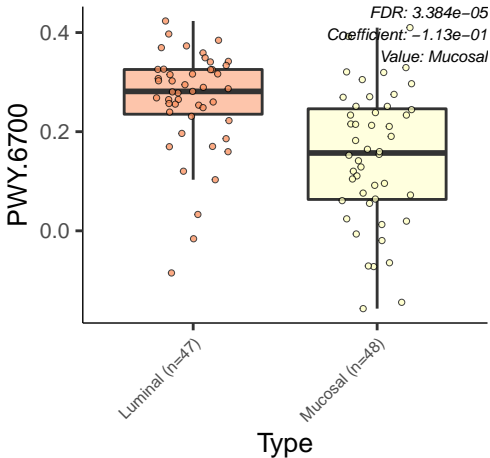
0.4

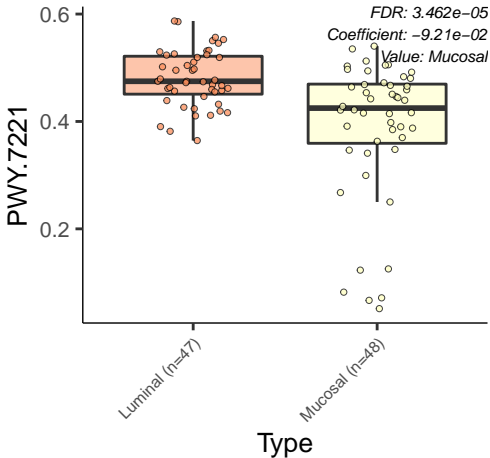
0.3

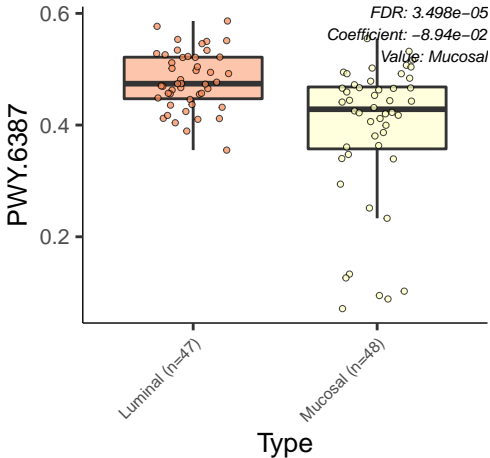
0.2

0.1

0.0

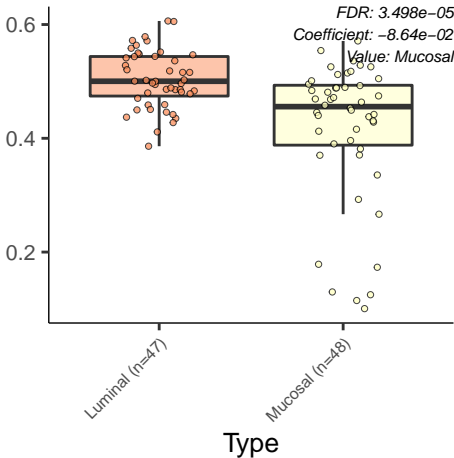




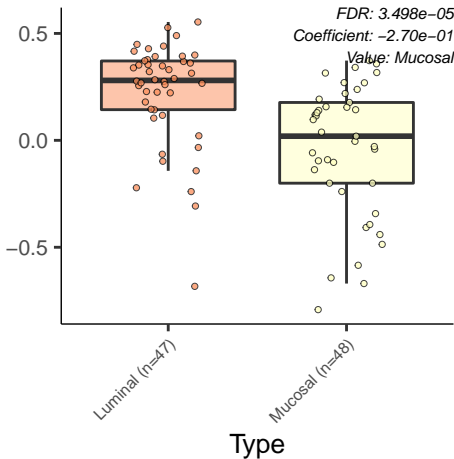




PWY.7208



PWY.922



P161.PWY

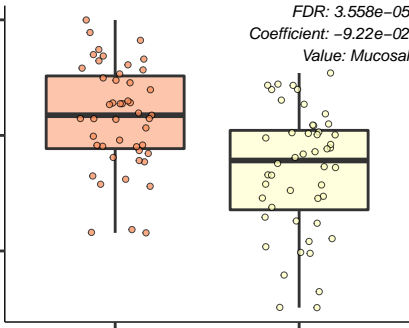
0.6  
0.4  
0.2

Luminal (n=47)

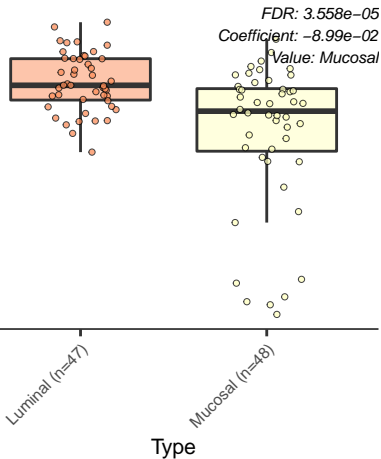
Mucosal (n=48)

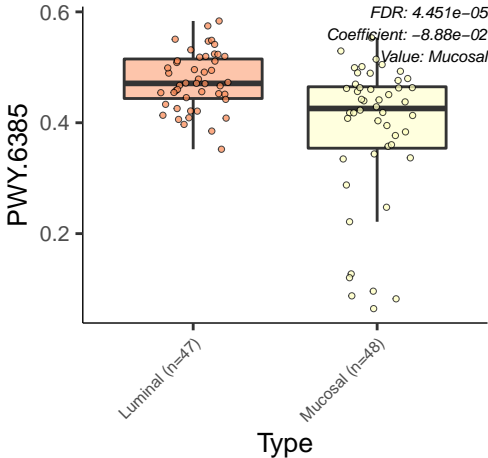
Type

*FDR: 3.558e-05*  
*Coefficient: -9.22e-02*  
*Value: Mucosal*



PEPTIDOGLYCANSYN.PWY





ANAGLYCOLYSIS.PWY

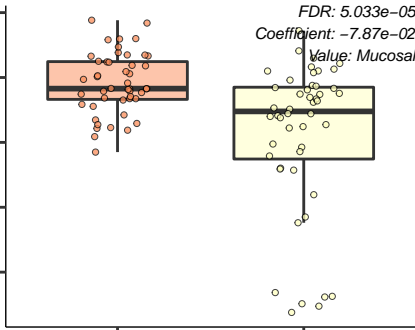
0.6  
0.5  
0.4  
0.3  
0.2

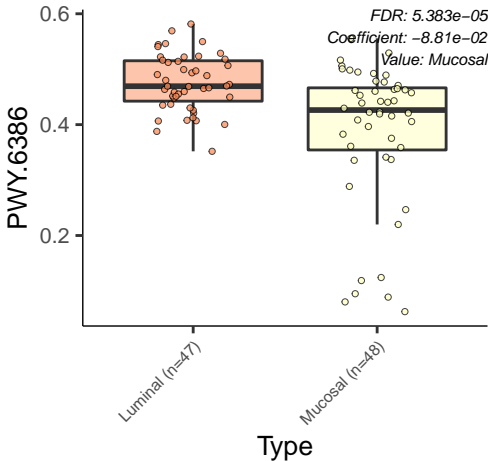
Luminal (n=47)

Mucosal (n=48)

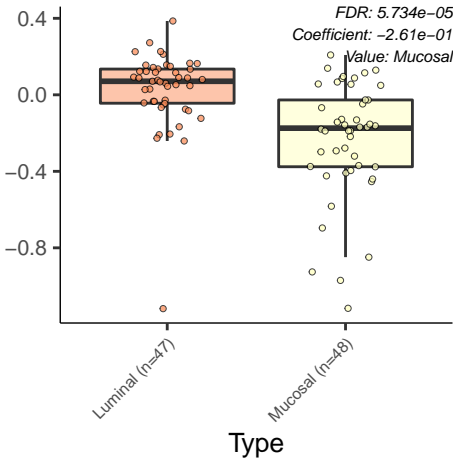
Type

FDR:  $5.033\text{e-}05$   
Coefficient:  $-7.87\text{e-}02$   
Value: Mucosal





PWY.6901





PWY.7219

Luminal (n=47)

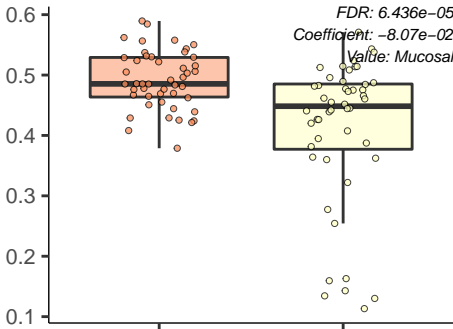
Mucosal (n=48)

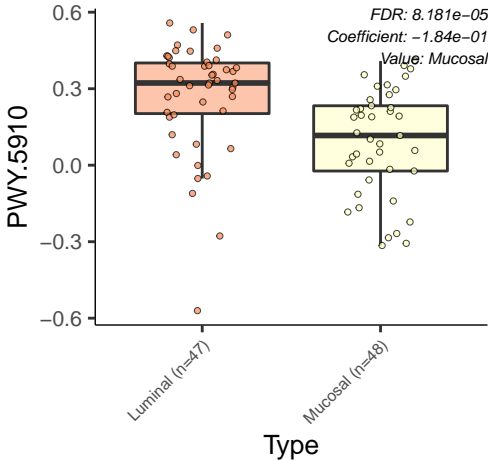
Type

*FDR: 6.436e-05*

*Coefficient: -8.07e-02*

*Value: Mucosal*





PWY.2942

Luminal (n=47)

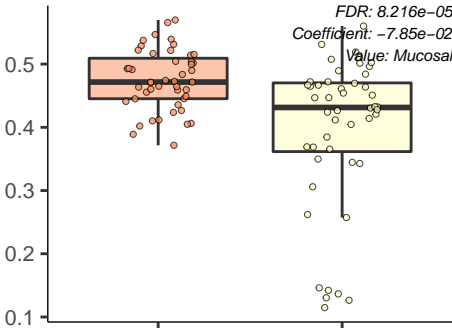
Mucosal (n=48)

Type

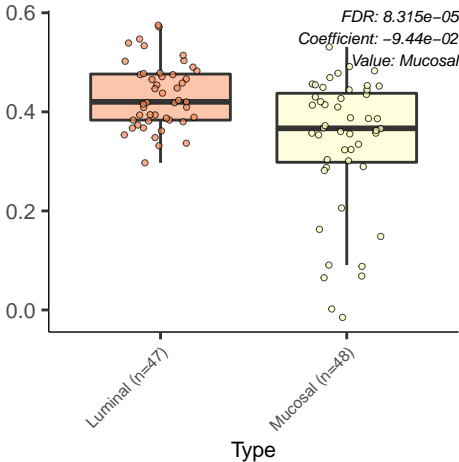
FDR:  $8.216 \times 10^{-5}$

Coefficient:  $-7.85 \times 10^{-2}$

Value: Mucosal



GLCMANNNAUT.PWY



PWY.5686

Luminal (n=47)

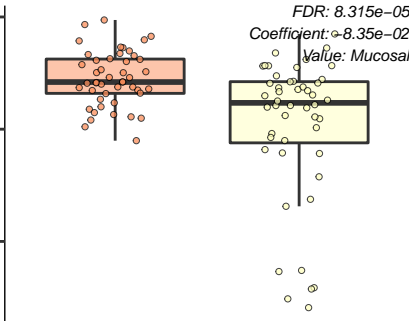
Mucosal (n=48)

Type

FDR:  $8.315e-05$

Coefficient:  $-8.35e-02$

Value: Mucosal



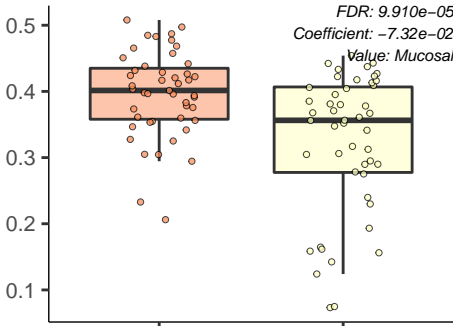
P441.PWY

Luminal (n=47)

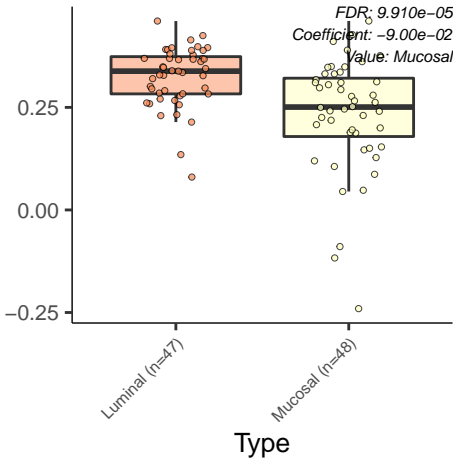
Mucosal (n=48)

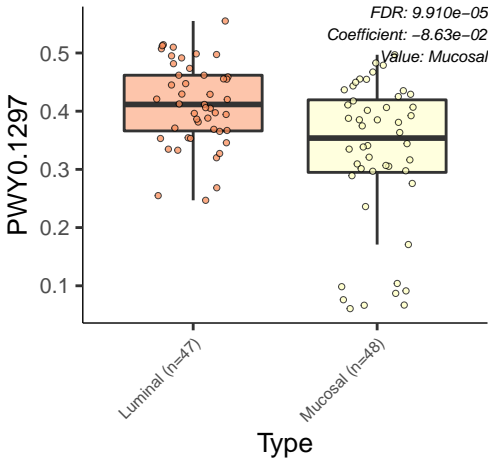
Type

FDR:  $9.910e-05$   
Coefficient:  $-7.32e-02$   
Value: Mucosal



PENTOSE.P.PWY







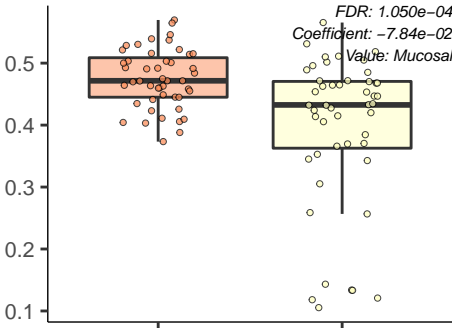
PWY.5097

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $1.050 \times 10^{-4}$   
Coefficient:  $-7.84 \times 10^{-2}$   
Value: Mucosal



TRNA.CHARGING.PWY

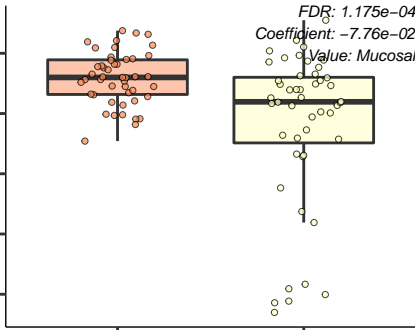
0.5  
0.4  
0.3  
0.2  
0.1

Luminal (n=47)

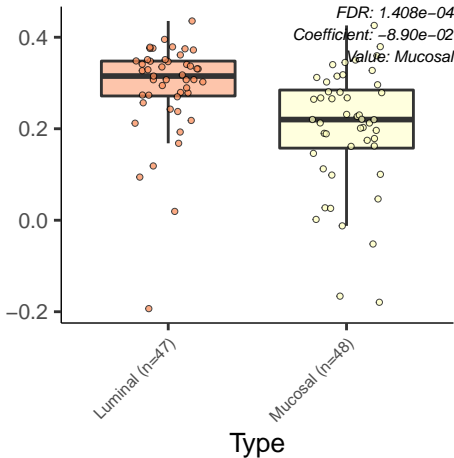
Mucosal (n=48)

Type

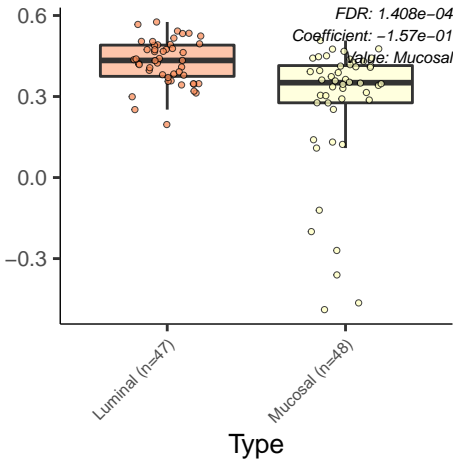
FDR:  $1.175e-04$   
Coefficient:  $-7.76e-02$   
Value: Mucosal

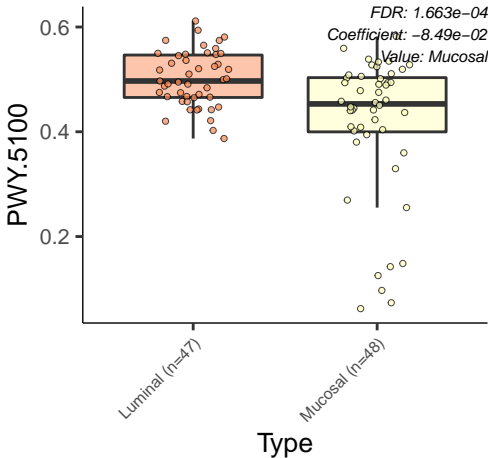


PANTOSYN.PWY



PWY.6471





THRESYN.PWY

Luminal (n=47)

Mucosal (n=48)

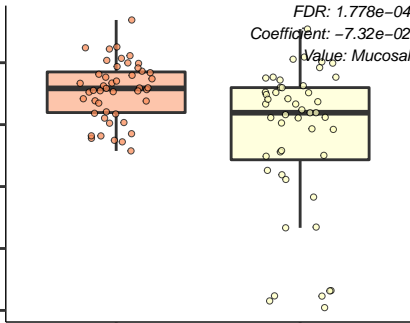
Type

FDR:  $1.778e-04$

Coefficient:  $-7.32e-02$

Value: Mucosal

0.5  
0.4  
0.3  
0.2  
0.1



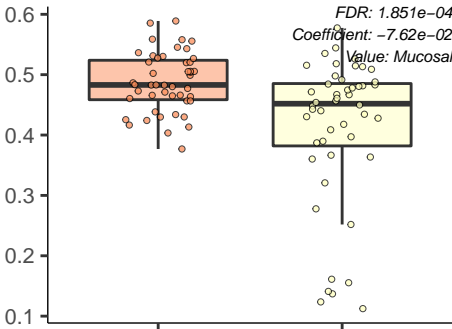
PWY.5667

Luminal (n=47)

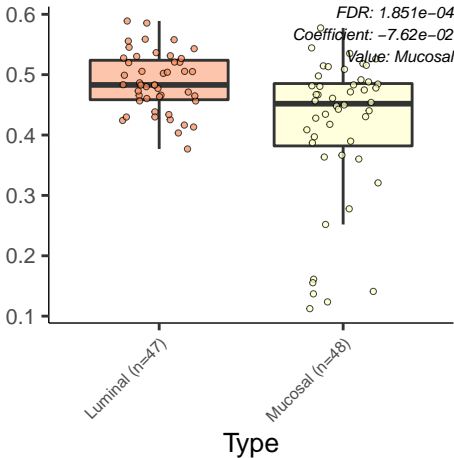
Mucosal (n=48)

Type

FDR:  $1.851e-04$   
Coefficient:  $-7.62e-02$   
Value: Mucosal



PWY0.1319





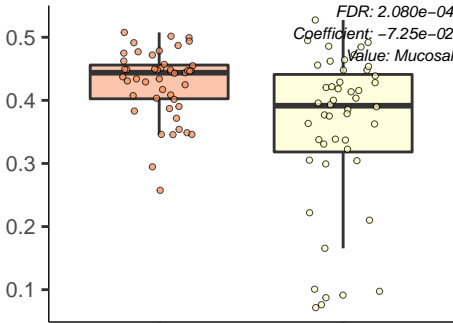
ASPASN.PWY

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $2.080 \times 10^{-4}$   
Coefficient:  $-7.25 \times 10^{-2}$   
Value: Mucosal



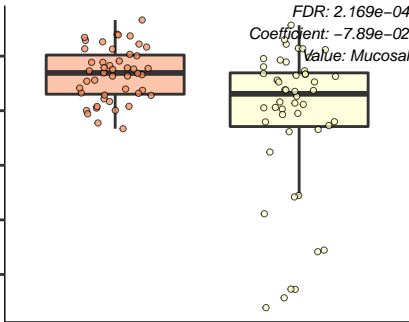
PWY.6609

Luminal (n=47)

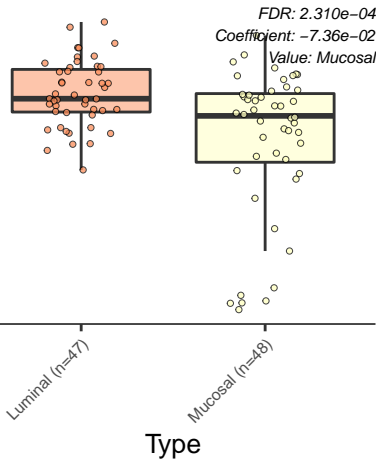
Mucosal (n=48)

Type

FDR:  $2.169 \times 10^{-4}$   
Coefficient:  $-7.89 \times 10^{-2}$   
Value: Mucosal



PHOSLIPSYN.PWY



PWY.6478

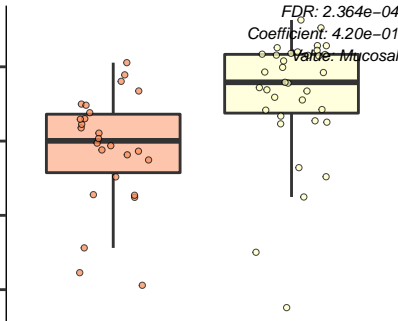
0.0  
-0.5  
-1.0  
-1.5

Luminal (n=47)

Mucosal (n=48)

Type

FDR: 2.364e-04  
Coefficient: 4.20e-01  
Value: Mucosal



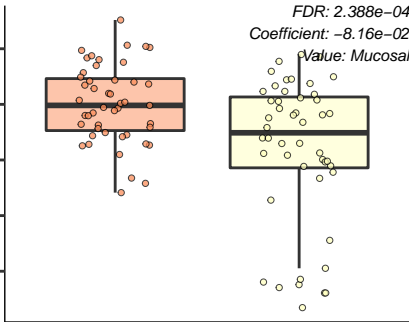
PWY0.1298

Luminal (n=47)

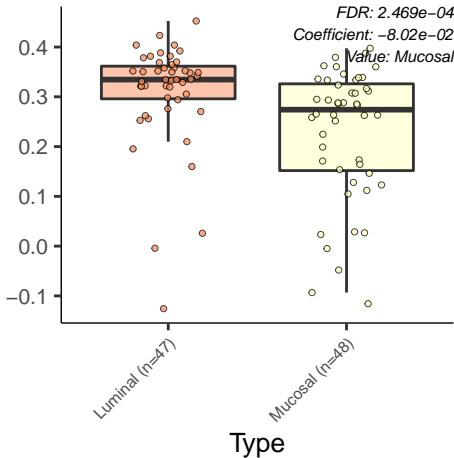
Mucosal (n=48)

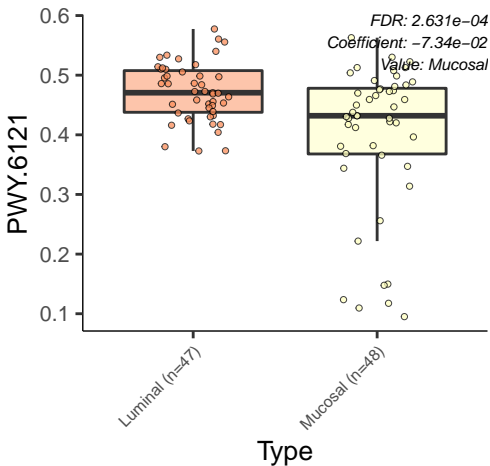
Type

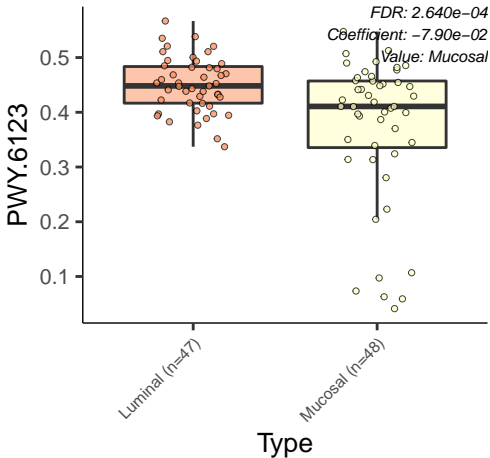
FDR:  $2.388e-04$   
Coefficient:  $-8.16e-02$   
Value: Mucosal



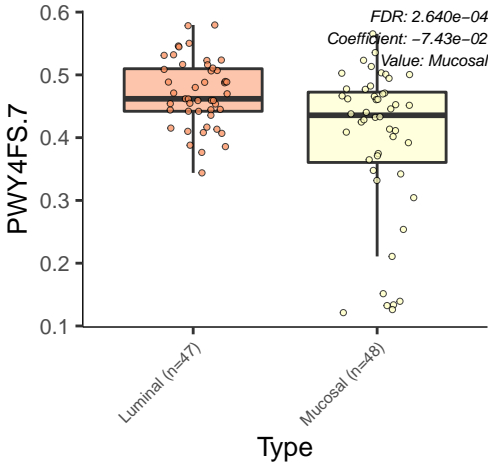
PWY.5659

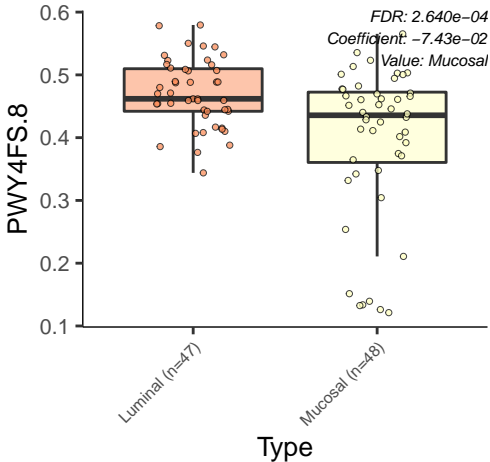












GLYCOLYSIS.E.D

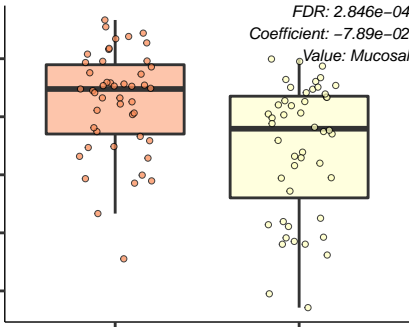
Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $2.846e-04$   
Coefficient:  $-7.89e-02$   
Value: Mucosal

0.4  
0.3  
0.2  
0.1  
0.0



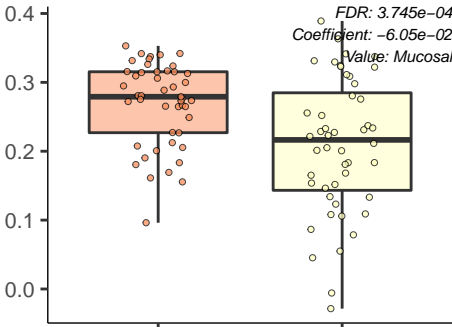
FOLSYN.PWY

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $3.745e-04$   
Coefficient:  $-6.05e-02$   
Value: Mucosal



P122.PWY

FDR: 3.745e-04

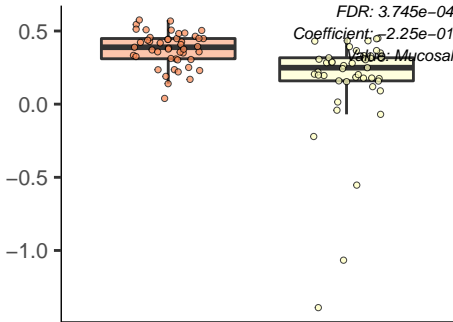
Coefficient: 2.25e-01

Value: Mucosal

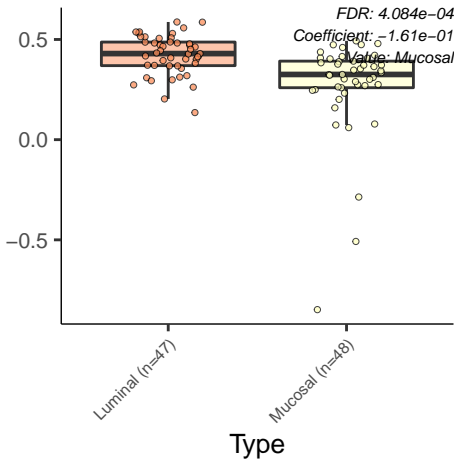
Luminal (n=47)

Mucosal (n=48)

Type



P124.PWY



PWY.6122

Luminal (n=47)

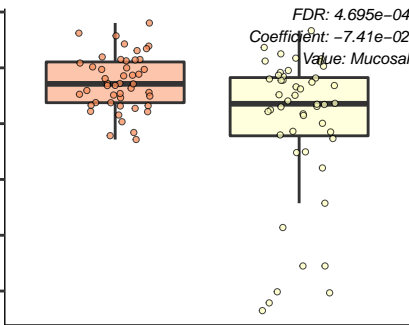
Mucosal (n=48)

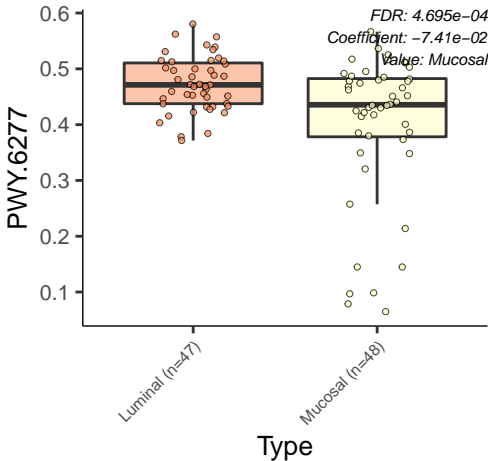
Type

*FDR: 4.695e-04*

*Coefficient: -7.41e-02*

*Value: Mucosal*







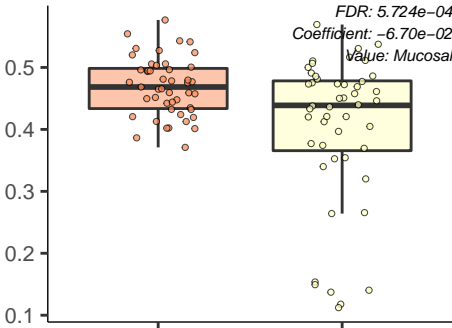
PWY.7663

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $5.724e-04$   
Coefficient:  $-6.70e-02$   
Value: Mucosal



PWY.621

Luminal (n=47)

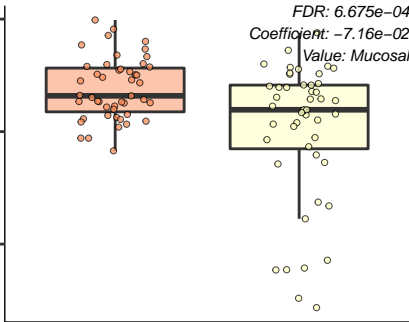
Mucosal (n=48)

Type

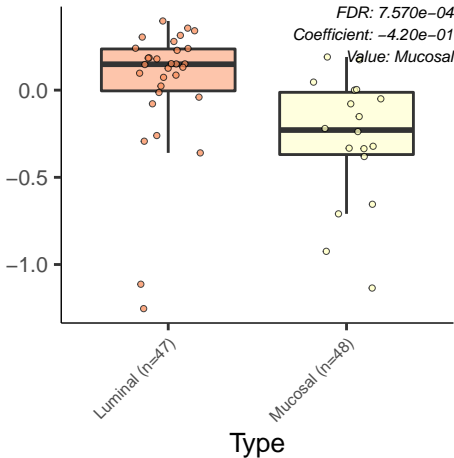
*FDR: 6.675e-04*

*Coefficient: -7.16e-02*

*Value: Mucosal*



PWY.4984



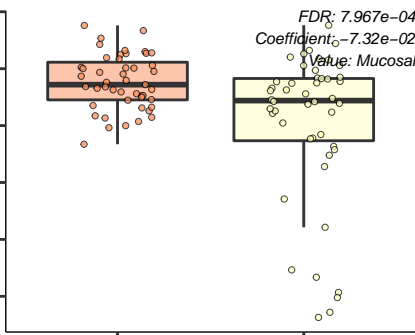
GLYCOGENSYNTH.PWY

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $7.967e-04$   
Coefficient:  $-7.32e-02$   
Value: Mucosal



PANTO.PWY

0.25  
0.00  
-0.25

Luminal (n=47)

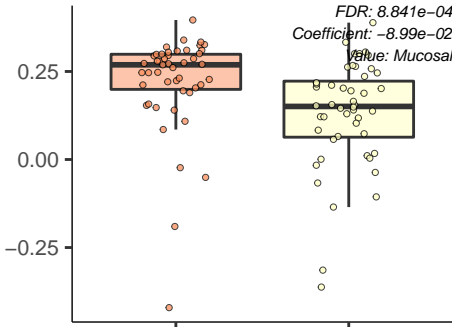
Mucosal (n=48)

Type

*FDR: 8.841e-04*

*Coefficient: -8.99e-02*

*Value: Mucosal*



PWY.5973

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $9.289 \times 10^{-4}$   
Coefficient:  $-6.61 \times 10^{-2}$   
Value: Mucosal

0.5

0.4

0.3

0.2

0.1

PWY.7377

*FDR: 9.396e-04*

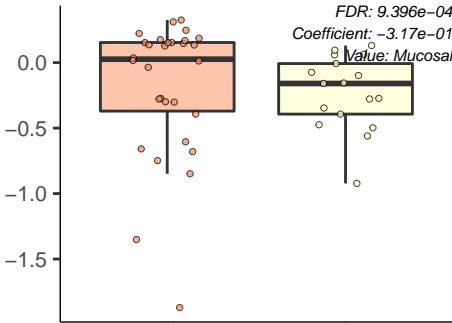
*Coefficient: -3.17e-01*

*Value: Mucosal*

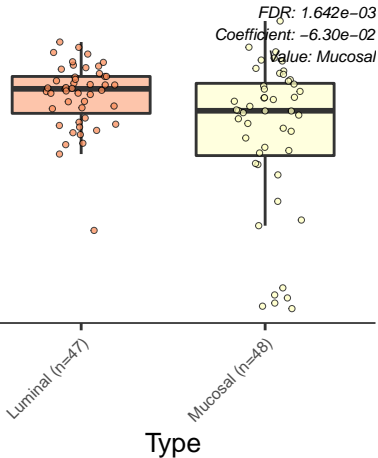
Luminal (n=47)

Mucosal (n=48)

Type

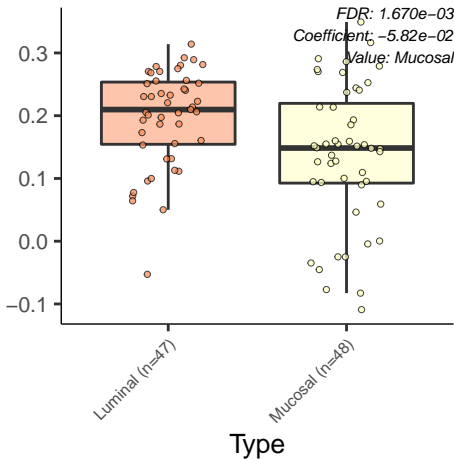


X1CMET2.PWY





PWY.6612



PWY.6703

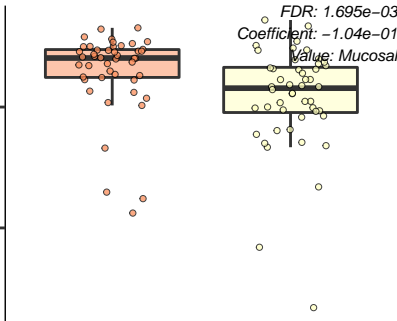
0.0  
-0.5

Luminal (n=47)

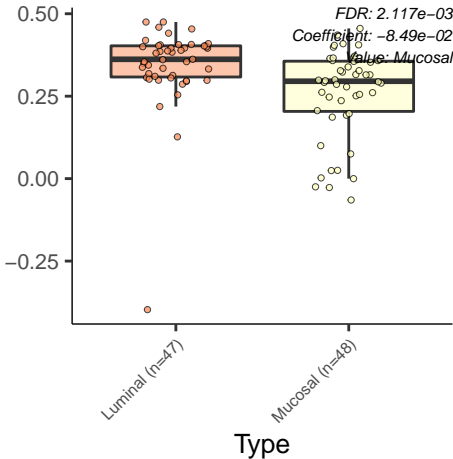
Mucosal (n=48)

Type

FDR:  $1.695e-03$   
Coefficient:  $-1.04e-01$   
Value: Mucosal



PWY.7199



PWY.1269

Luminal (n=47)

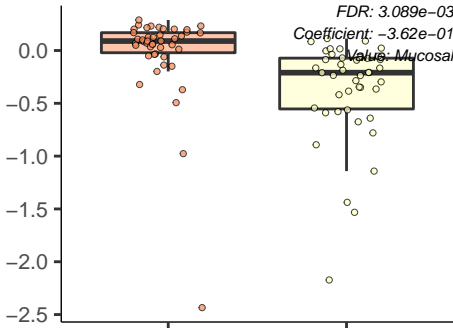
Mucosal (n=48)

Type

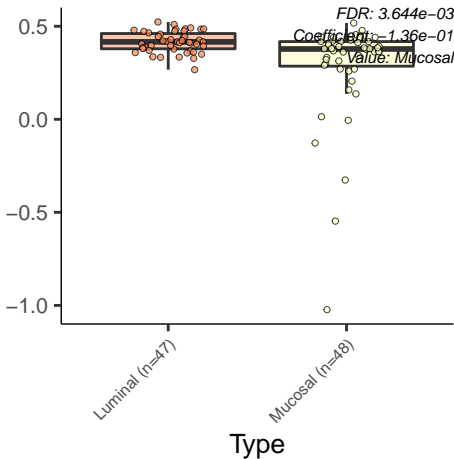
FDR: 3.089e-03

Coefficient: -3.62e-01

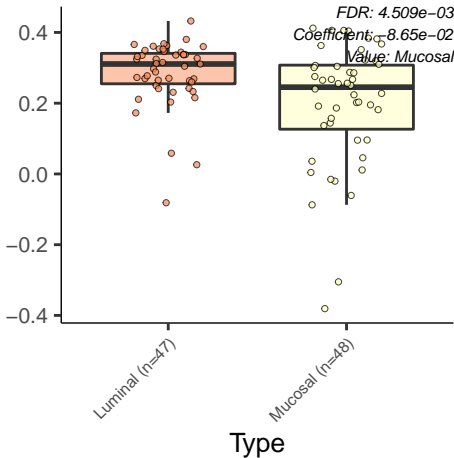
Value: Mucosal



OANTIGEN.PWY



PWY.6147



PWY.7539

FDR: 4.583e-03

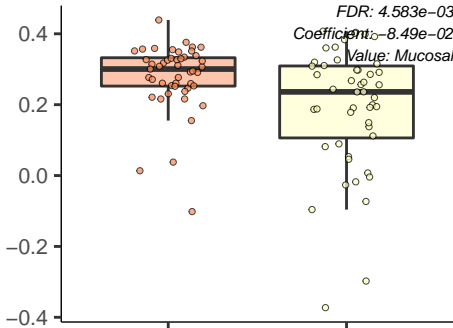
Coefficient: -8.49e-02

Value: Mucosal

Luminal (n=47)

Mucosal (n=48)

Type



PWY0.1586

Luminal (n=47)

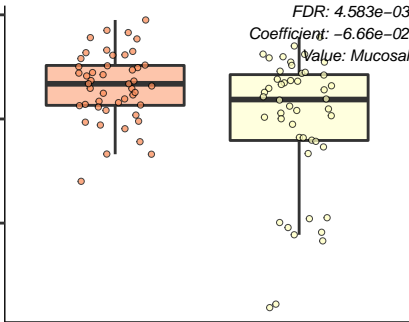
Mucosal (n=48)

Type

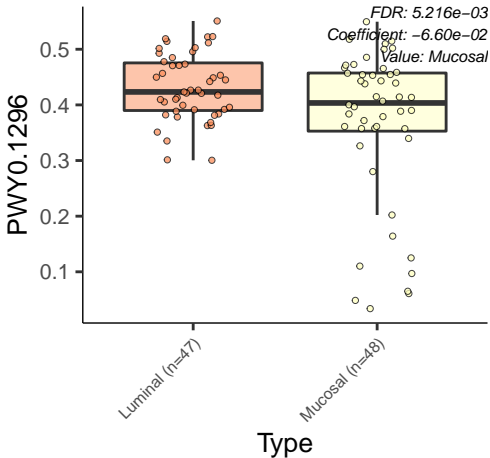
*FDR: 4.583e-03*

*Coefficient: -6.66e-02*

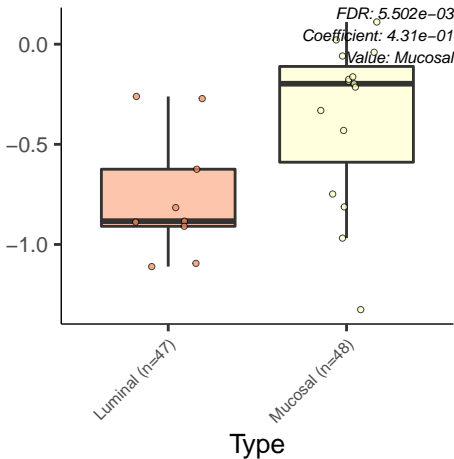
*Value: Mucosal*



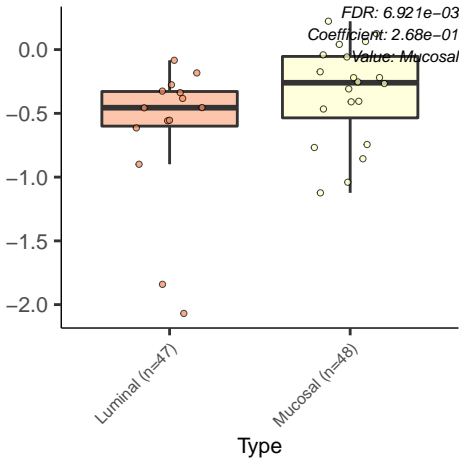




P562.PWY



METH.ACETATE.PWY



THISYN.PWY

0.0  
-0.5  
-1.0  
-1.5

Luminal (n=47)

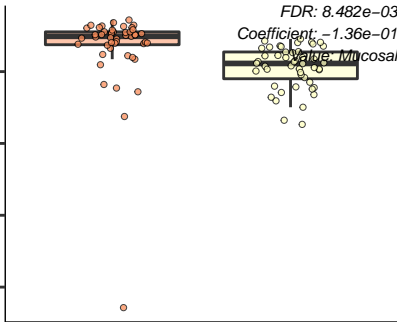
Mucosal (n=48)

Type

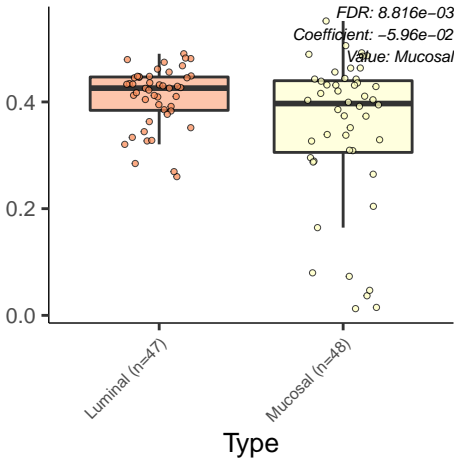
*FDR: 8.482e-03*

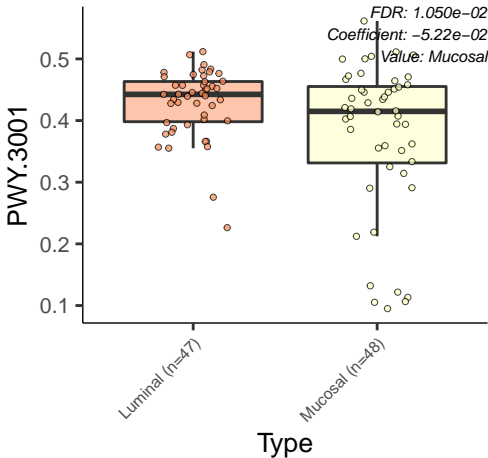
*Coefficient: -1.36e-01*

*Value: Mucosal*

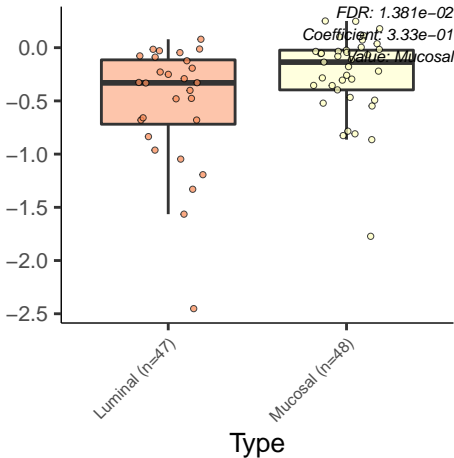


PWY.5121

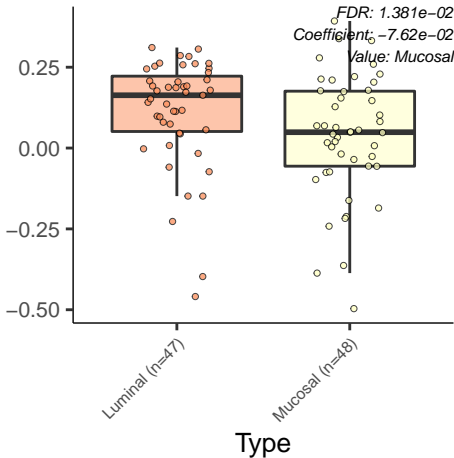




FUCCAT.PWY

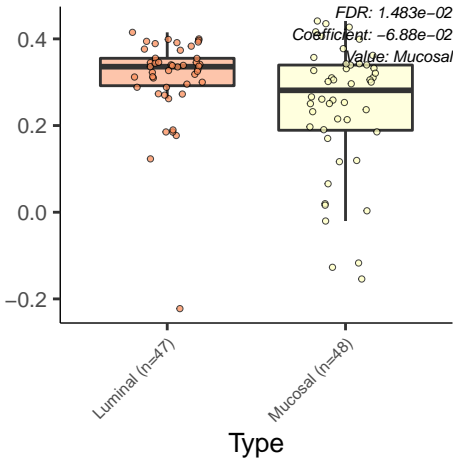


HEMESYN2.PWY





PYRIDNUCSYN.PWY



CALVIN.PWY

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $1.579 \times 10^{-2}$

Coefficient:  $-4.44 \times 10^{-2}$

Value: Mucosal

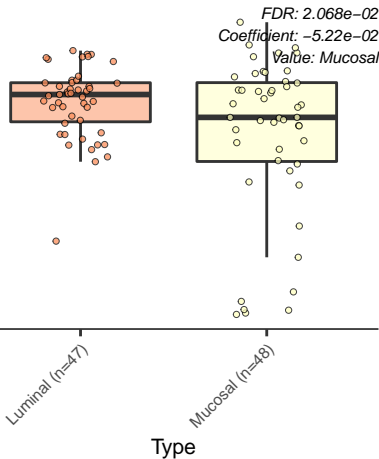
0.5

0.4

0.3

0.2

DAPLYSINESYN.PWY



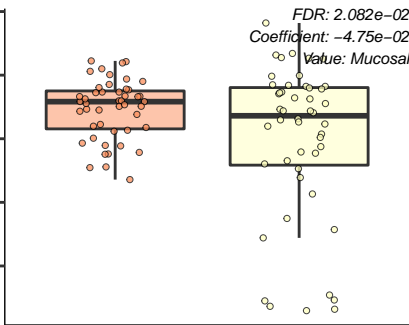
GLYCOCAT.PWY

Luminal (n=47)

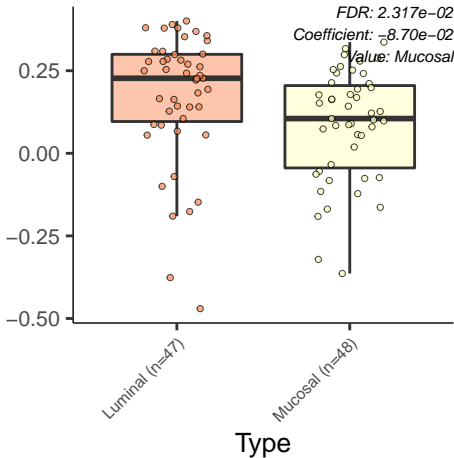
Mucosal (n=48)

Type

FDR:  $2.082e-02$   
Coefficient:  $-4.75e-02$   
Value: Mucosal



P461.PWY



PWY.6737

Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $2.589 \times 10^{-2}$   
Coefficient:  $-4.82 \times 10^{-2}$   
Value: Mucosal

0.5

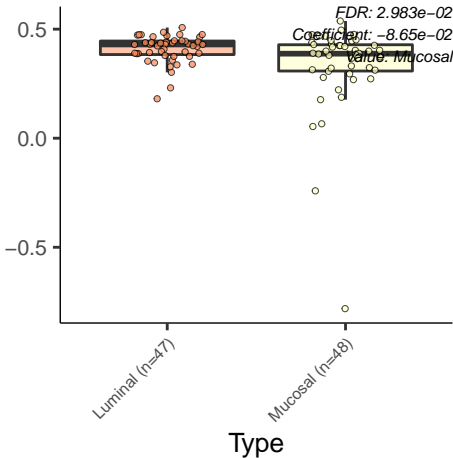
0.4

0.3

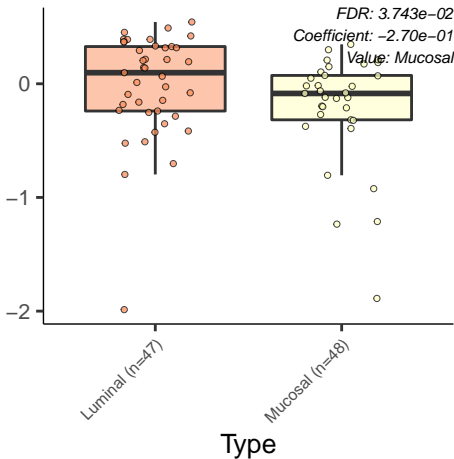
0.2

0.1

DTDPRHAMSYN.PWY



PWY.7013





RIBOSYN2.PWY

Luminal (n=47)

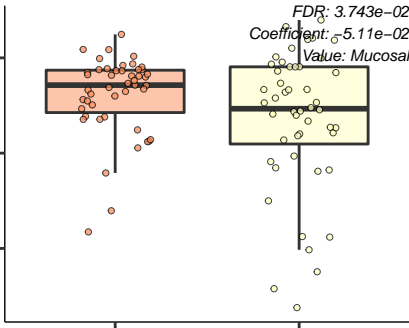
Mucosal (n=48)

Type

FDR:  $3.743e-02$

Coefficient:  $-5.11e-02$

Value: Mucosal



P23.PWY

*FDR: 3.869e-02*

*Coefficient: -1.52e-01*

*Value: Mucosal*

0.0

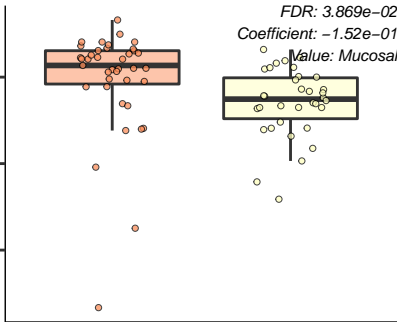
-0.5

-1.0

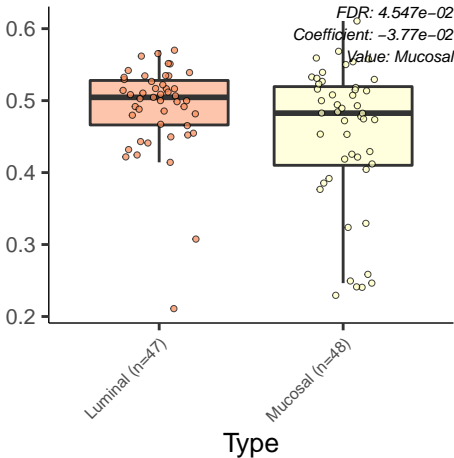
Luminal (n=47)

Mucosal (n=48)

Type



NONOXIPENT.PWY



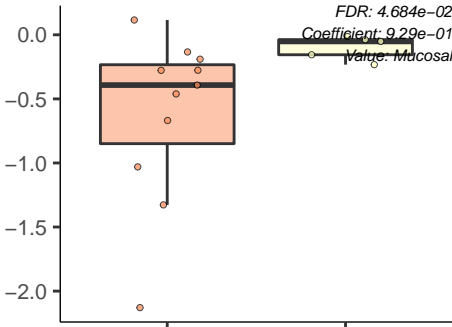
PYRIDOXSYN.PWY

FDR: 4.684e-02  
Coefficient: 9.29e-01  
Value: Mucosal

Luminal (n=47)

Mucosal (n=48)

Type



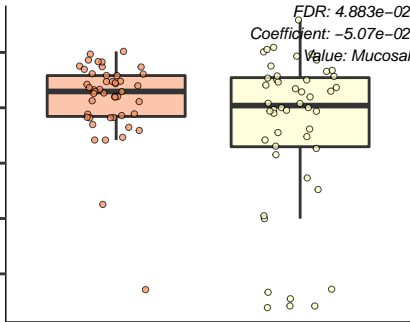
SER.GLYSYN.PWY

Luminal (n=47)

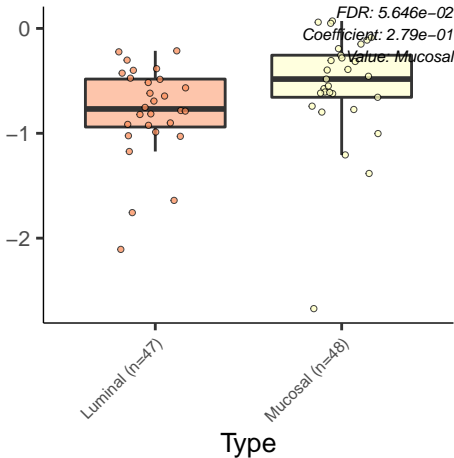
Mucosal (n=48)

Type

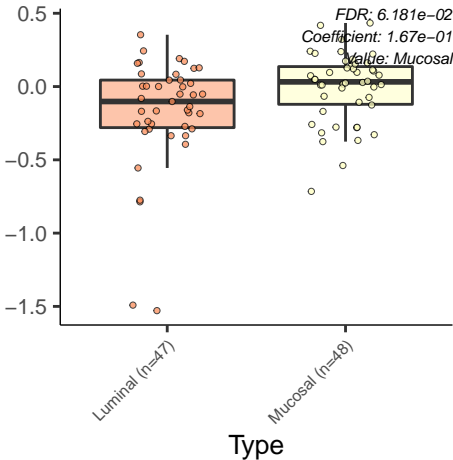
FDR:  $4.883e-02$   
Coefficient:  $-5.07e-02$   
Value: Mucosal



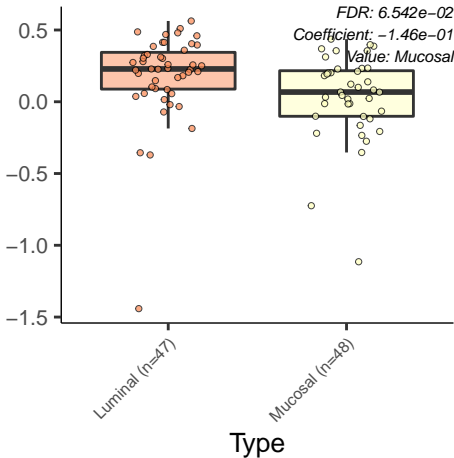
POLYAMSYN.PWY



MET.SAM.PWY

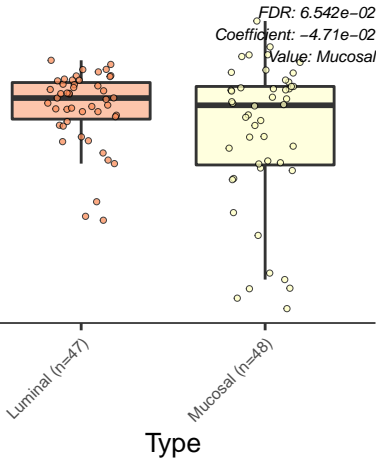


LACTOSECAT.PWY





NONMEVIPP.PWY



PWY.7560

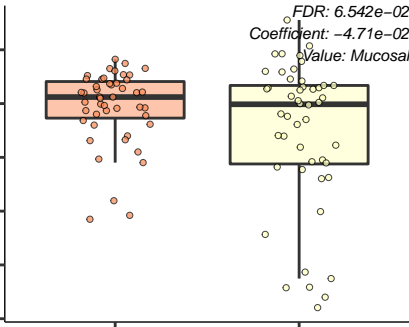
Luminal (n=47)

Mucosal (n=48)

Type

FDR:  $6.542 \times 10^{-2}$   
Coefficient:  $-4.71 \times 10^{-2}$   
Value: Mucosal

0.5  
0.4  
0.3  
0.2  
0.1  
0.0



RUMP.PWY

0.0

-0.5

Luminal (n=47)

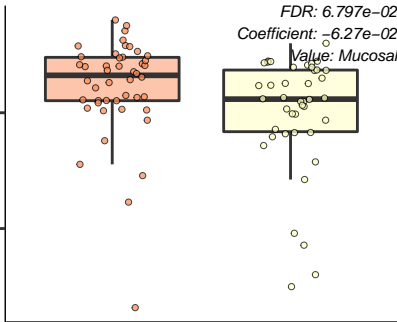
Mucosal (n=48)

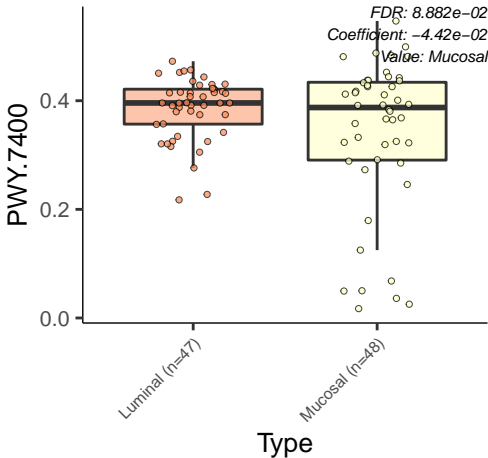
Type

FDR:  $6.797e-02$

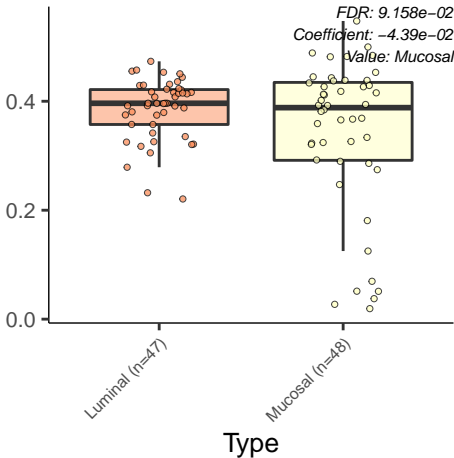
Coefficient:  $-6.27e-02$

Value: Mucosal

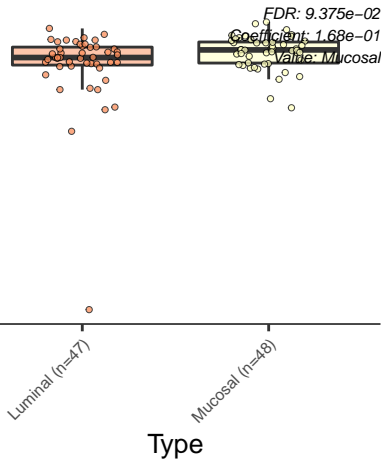




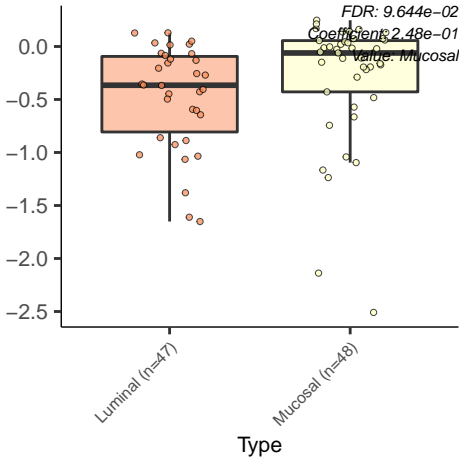
ARGSYN.PWY



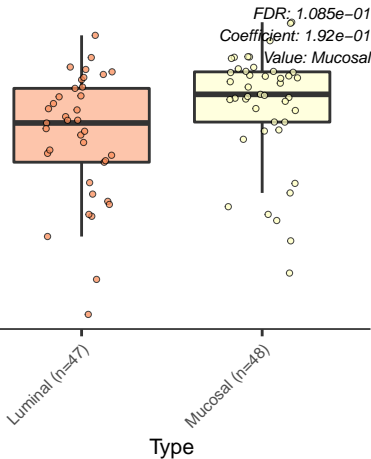
PWY.5347



NAD.BIOSYNTHESIS.II



HOMOSER.METSYN.PWY





HEXITOLDEGSUPER.PWY

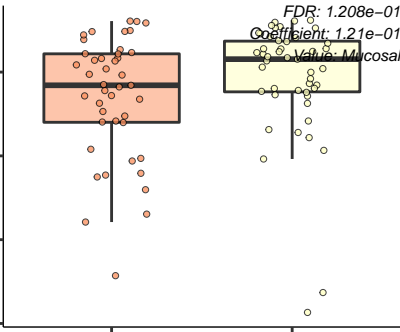
0.0  
-0.5  
-1.0  
-1.5

Luminal (n=47)

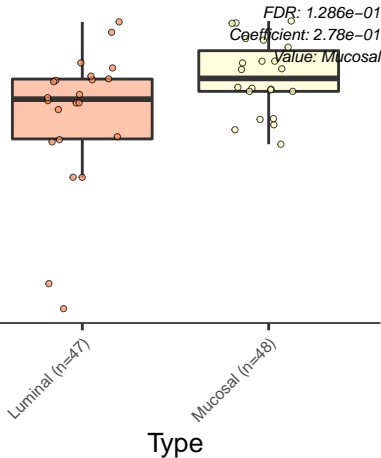
Mucosal (n=48)

Type

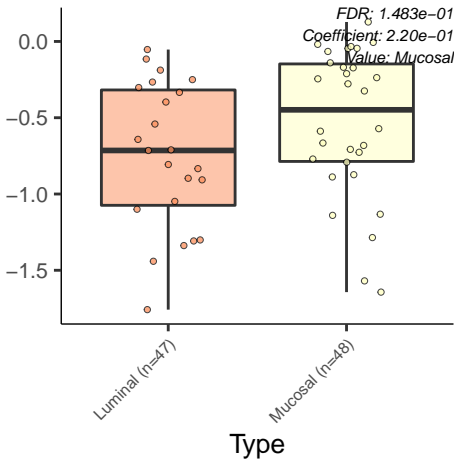
FDR: 1.208e-01  
Coefficient: 1.21e-01  
Value: Mucosal



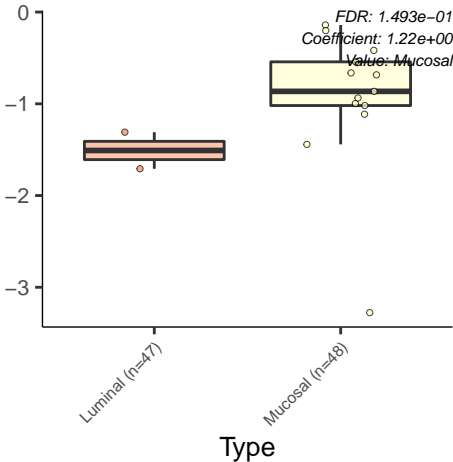
SO4ASSIM.PWY



FUC.RHAMCAT.PWY



P162.PWY



SALVADEHYPOX.PWY

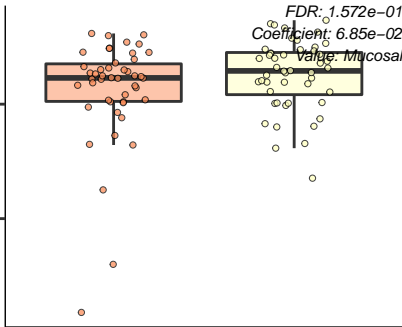
0.0  
-0.5

Luminal (n=47)

Mucosal (n=48)

Type

FDR: 1.572e-01  
Coefficient: 6.85e-02  
Value: Mucosal



PWY.7003

Luminal (n=47)

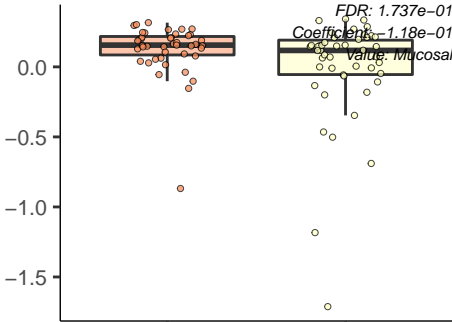
Mucosal (n=48)

Type

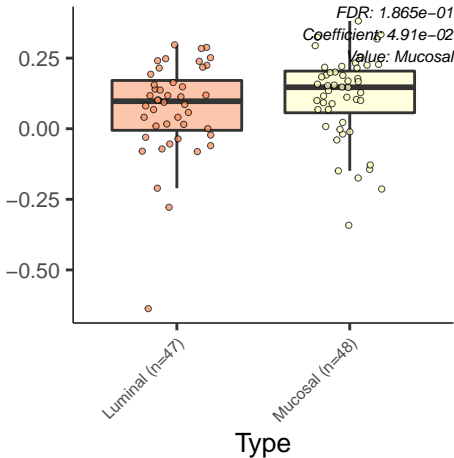
FDR: 1.737e-01

Coefficient: -1.18e-01

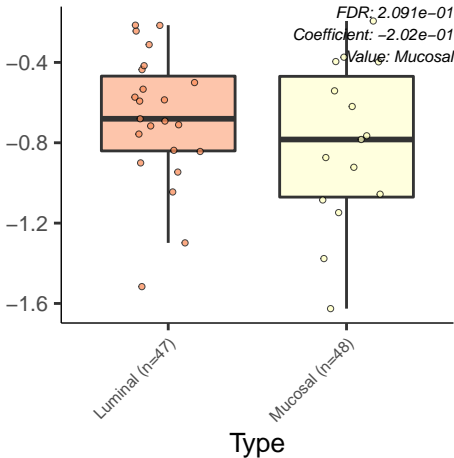
Value: Mucosal



PWY.6608

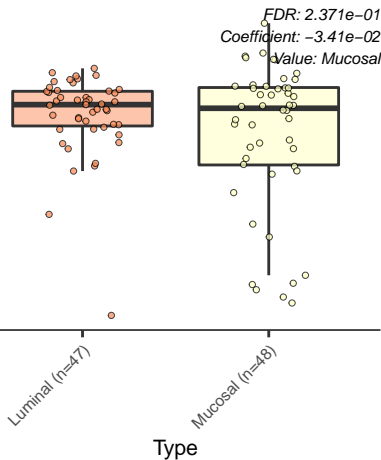


HISDEG.PWY





BRANCHED.CHAIN.AA.SYN.PWY



ARGSYNBSUB.PWY

