

**Supplemental File 5. Boxplots of top 20 olfaction-associated genes expressed differentially in Rock compared to other strains.** Boxplots represent interquartile range of expression from Rock (n=3) versus the other three strains, whiskers represent first and fourth quartiles, and solid lines in boxes represent median expression values. Circles represent expression values from individual samples. Differential expression was determined using chi-squared goodness of fit tests, and  $p < 0.05$  represent significantly different genes.

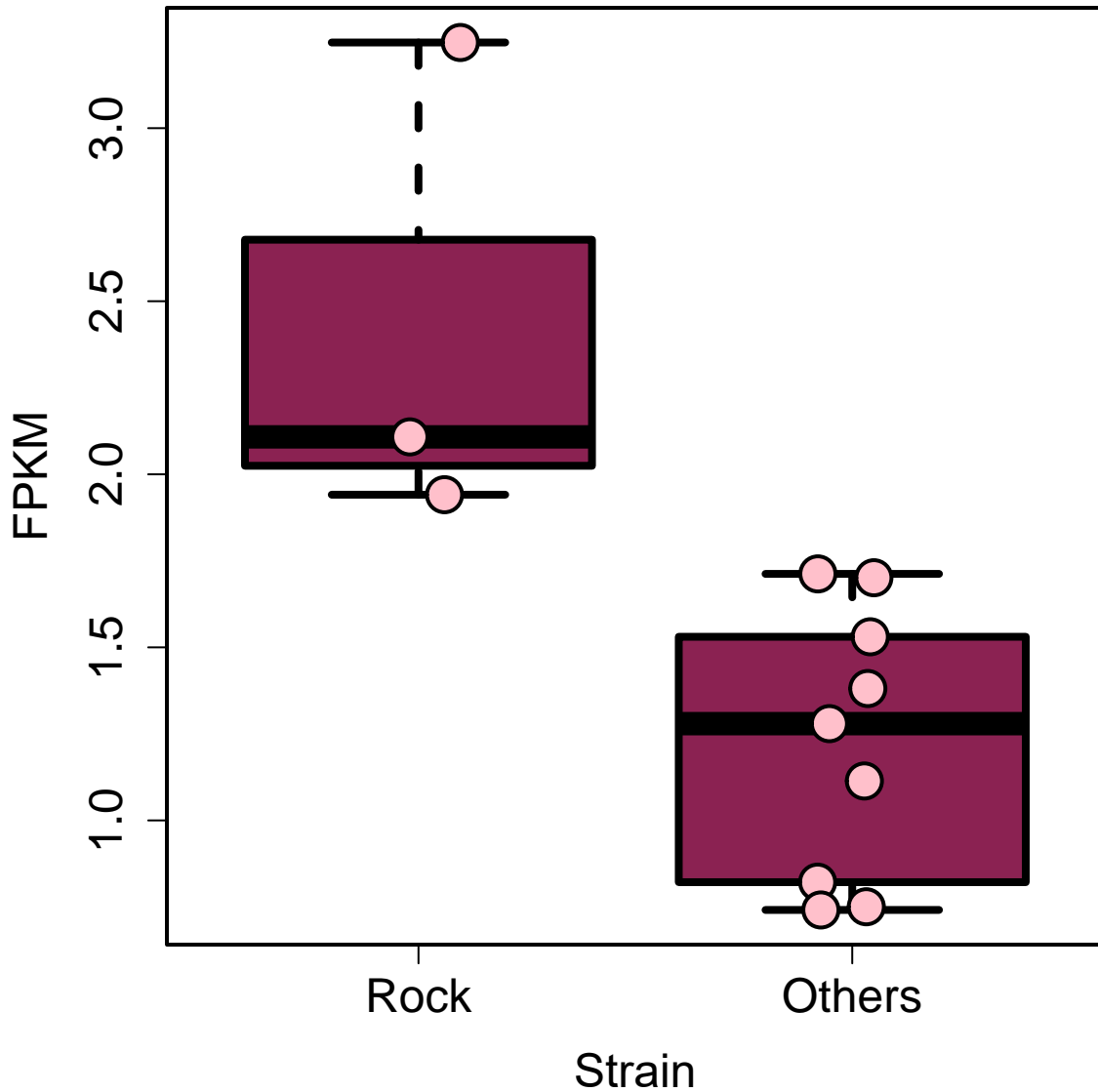




Gene: AAEL013893 Description: *or125*

P-value: 0.0070536

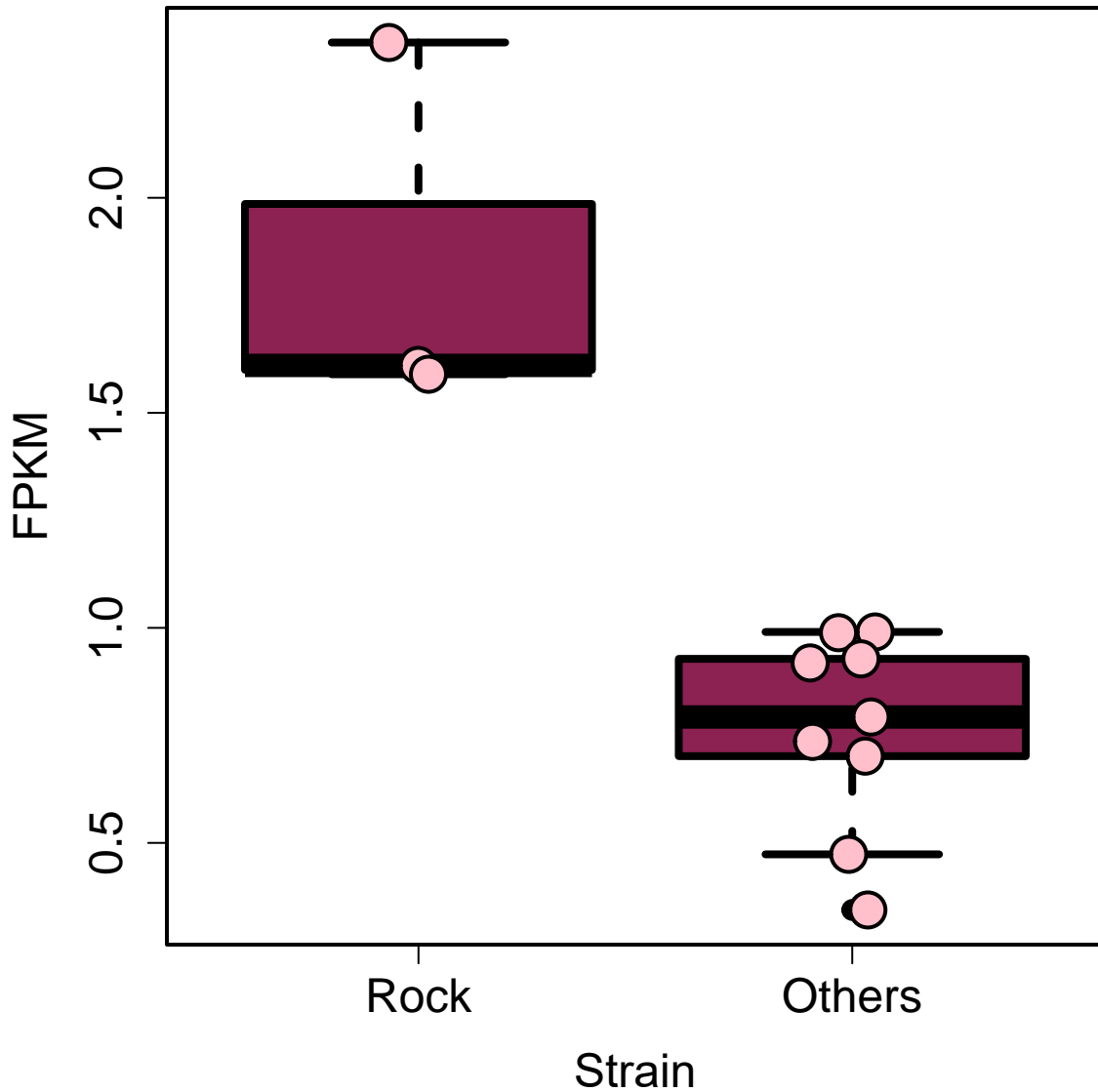
Fold Change: 1.98



Gene: AAEL025139 Description: *or116*

P-value: 0.0070536

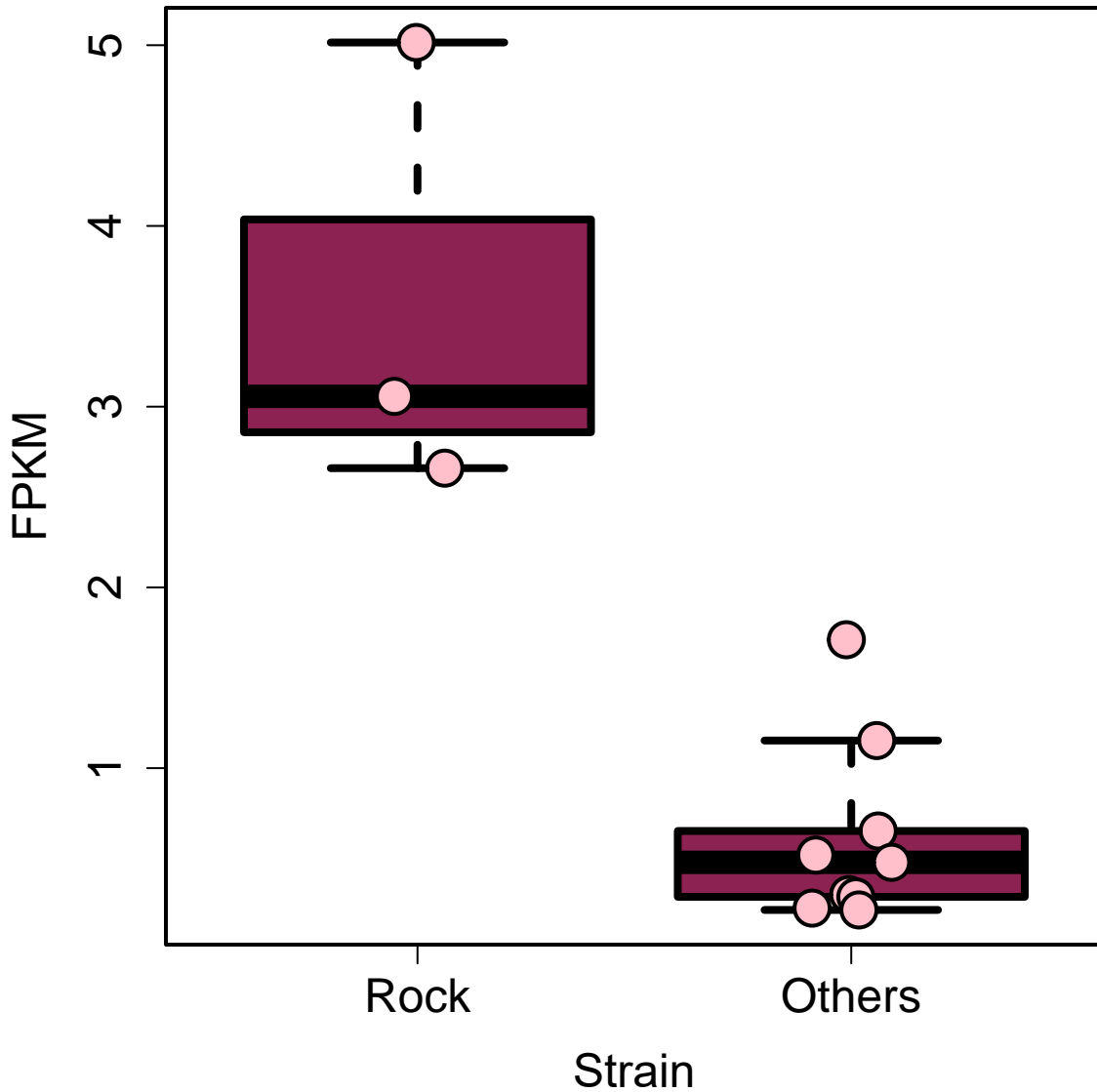
Fold Change: 2.43



Gene: AAEL008368 Description: *or13*

P-value: 0.0070536

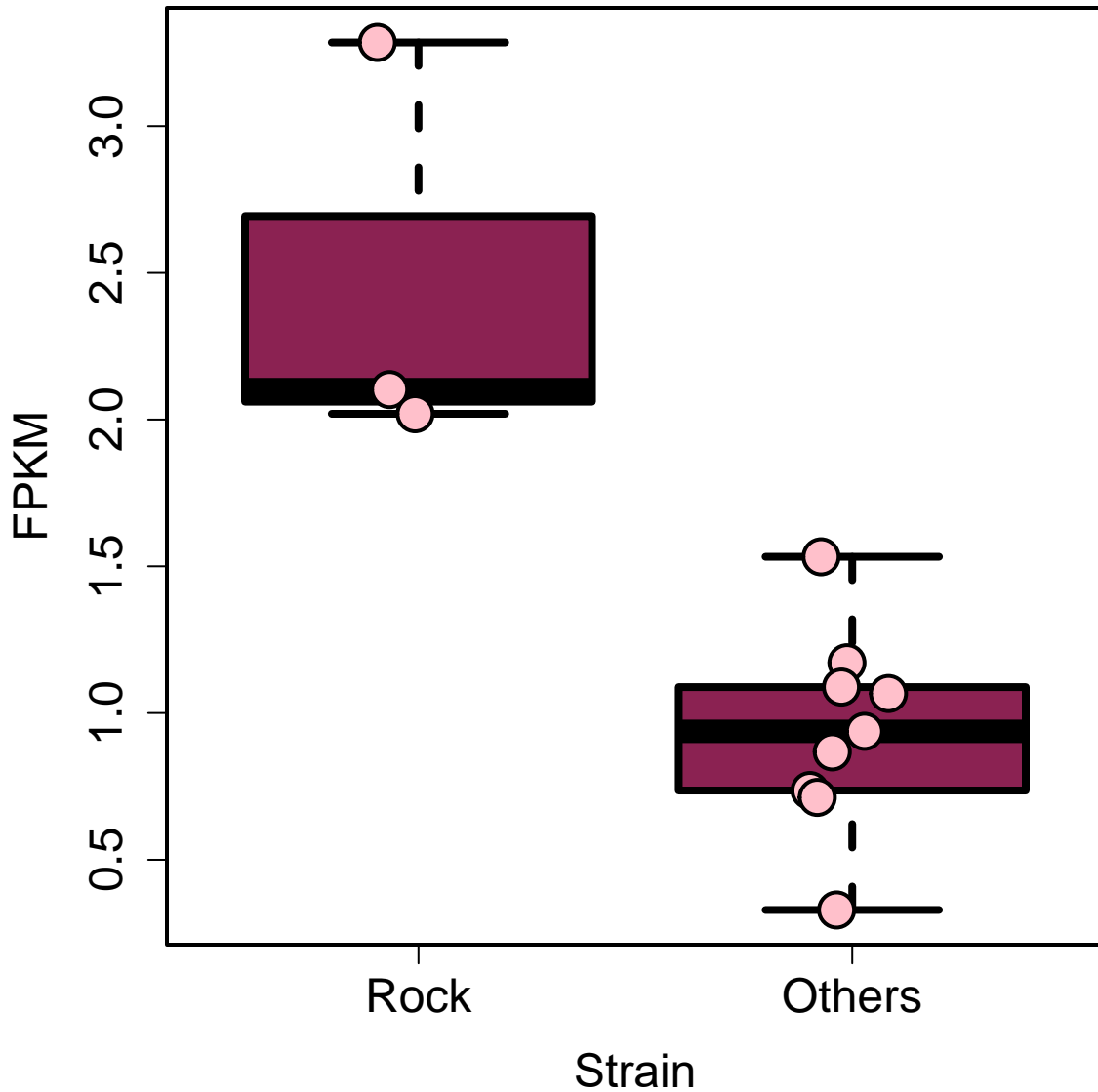
Fold Change: 5.81



Gene: AAEL027053 Description: *or28*

P-value: 0.0070536

Fold Change: 2.63



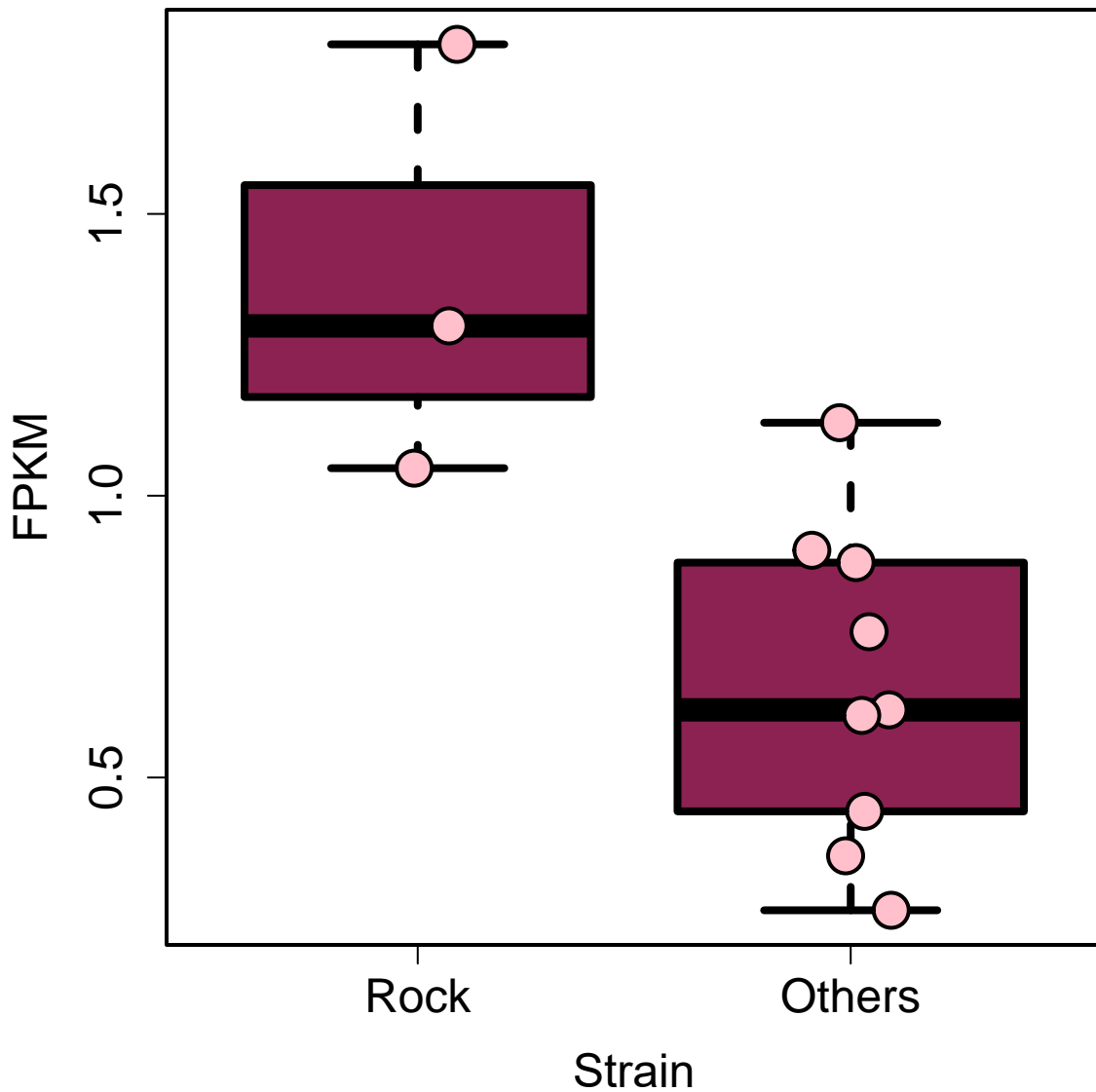




Gene: AAEL017305 Description: *or81*

P-value: 0.033895

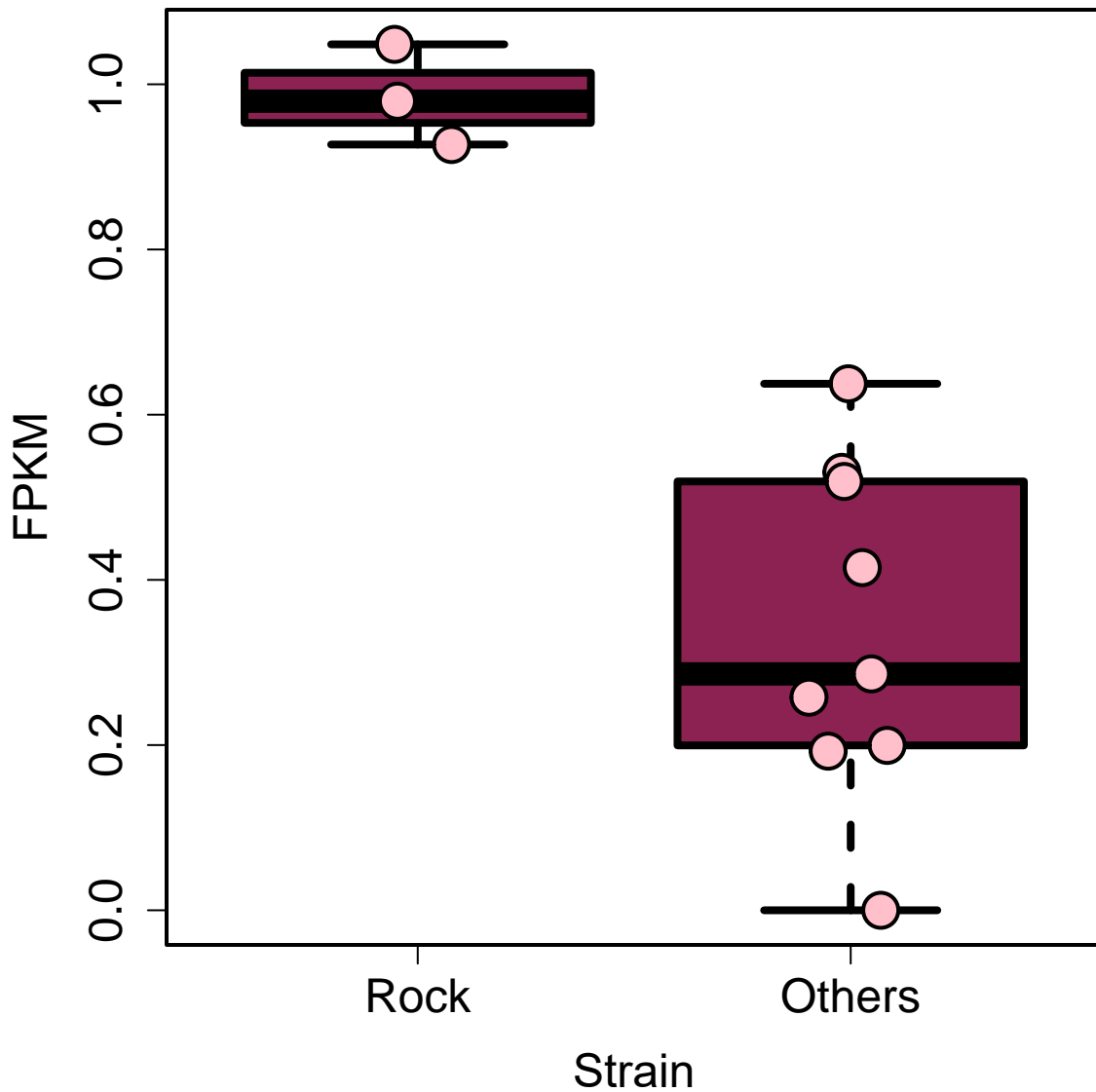
Fold Change: 2.09



Gene: AAEL023000 Description: Arrestin

P-value: 0.033895

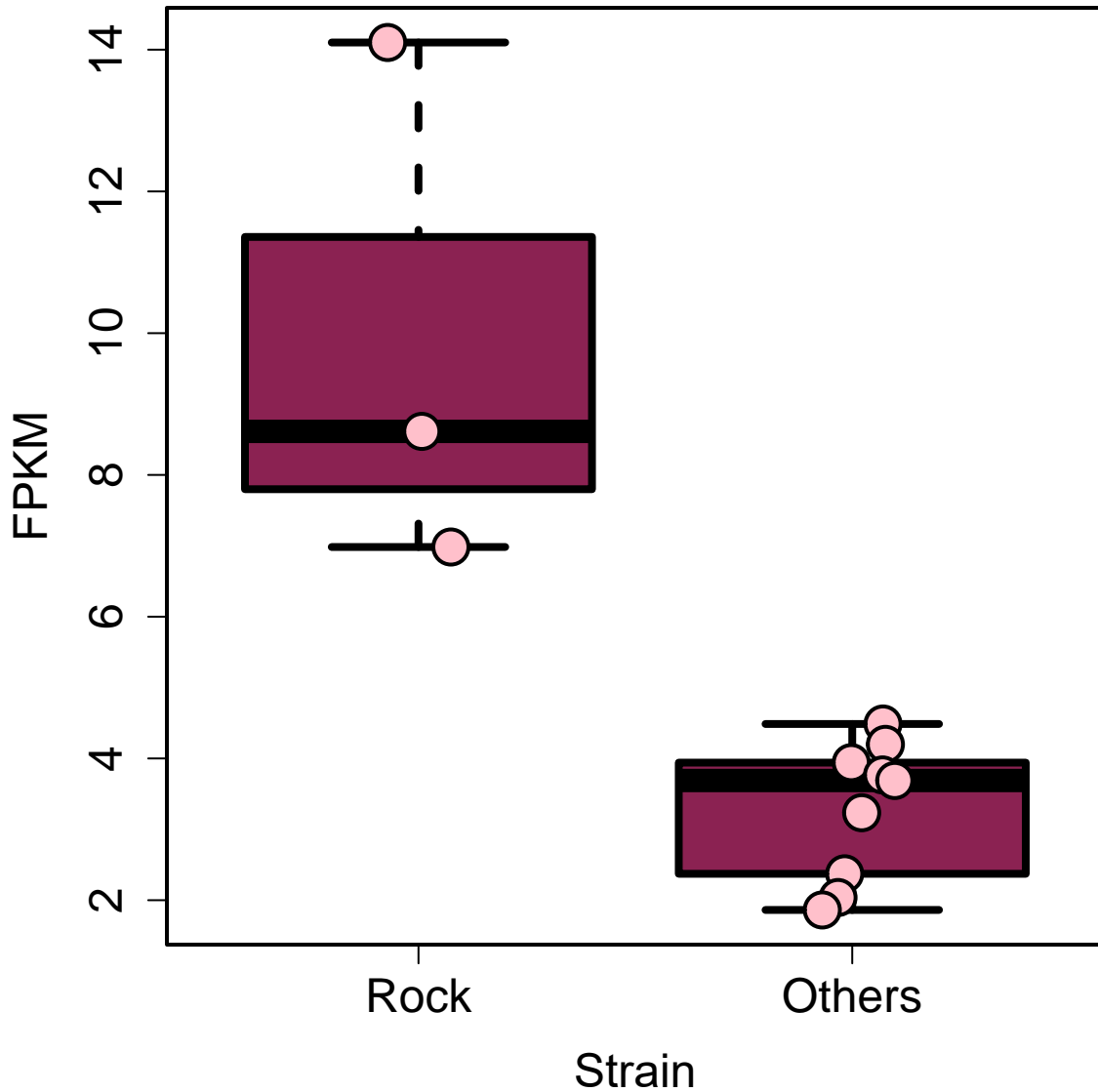
Fold Change: 2.92



Gene: AAEL006003 Description: *or10*

P-value: 0.073638

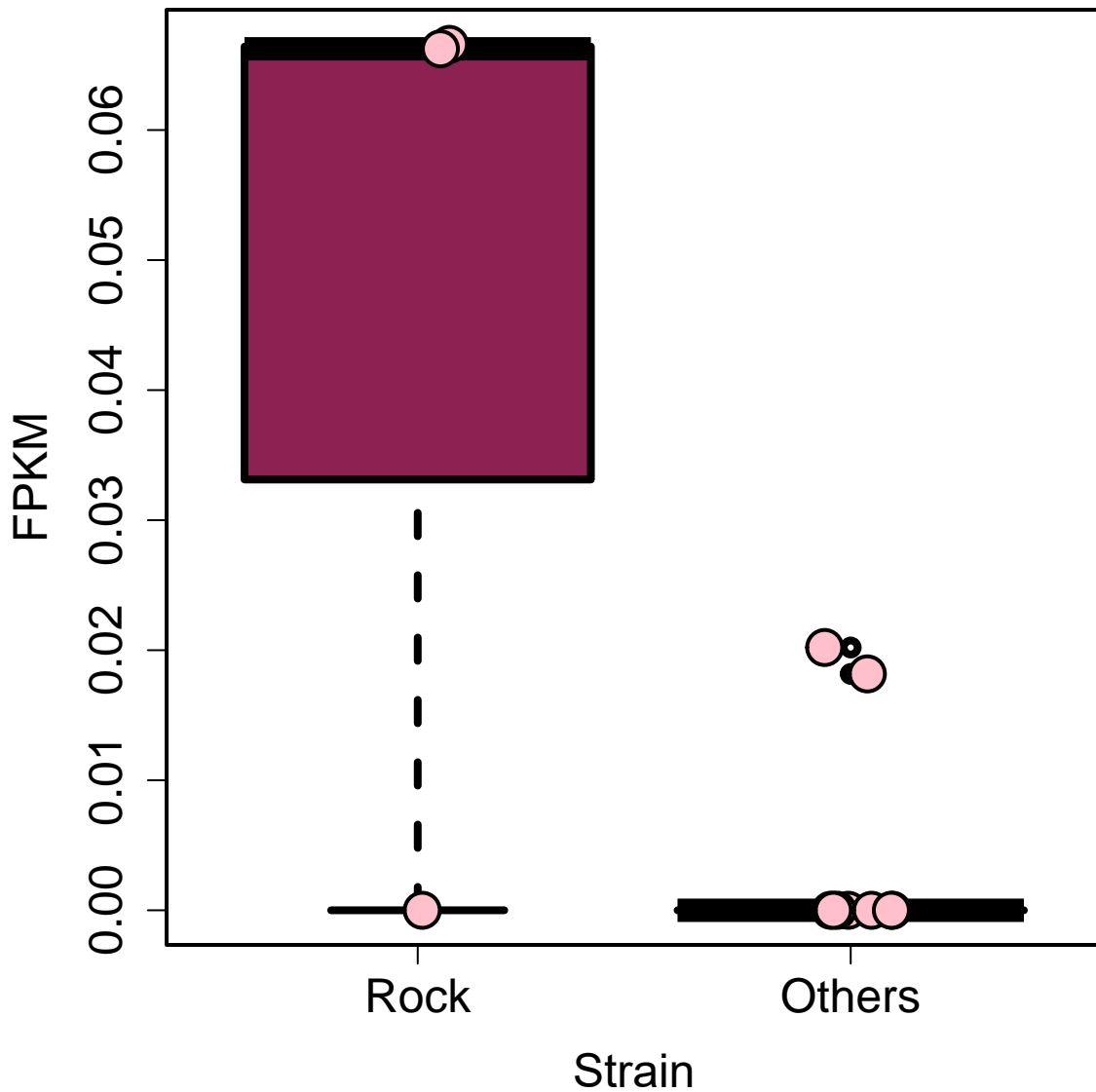
Fold Change: 3.01



Gene: AAEL018101 Description: *ir7v.3*

P-value: 0.073638

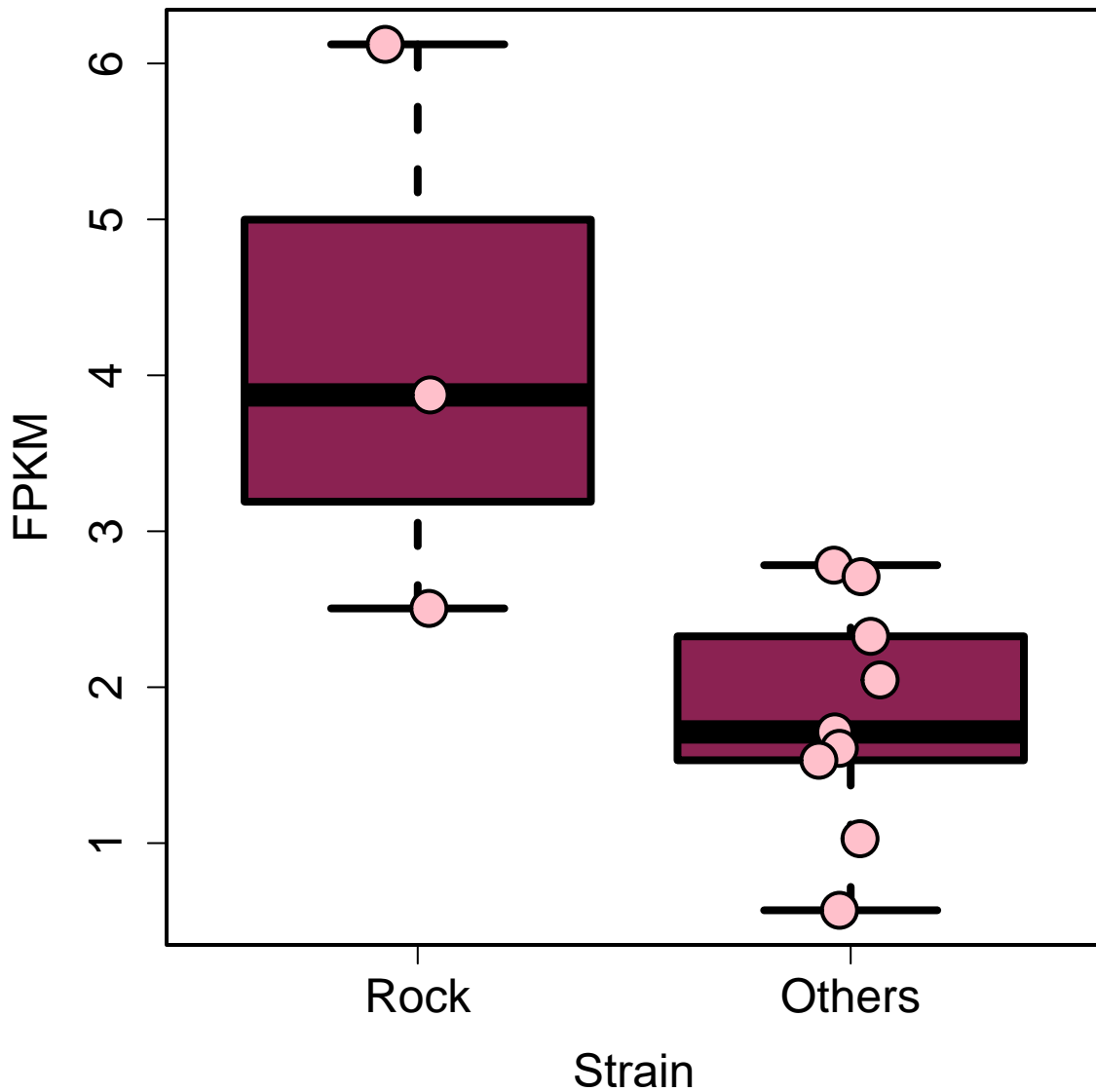
Fold Change: 10.4



Gene: AAEL013507 Description: *or52*

P-value: 0.073638

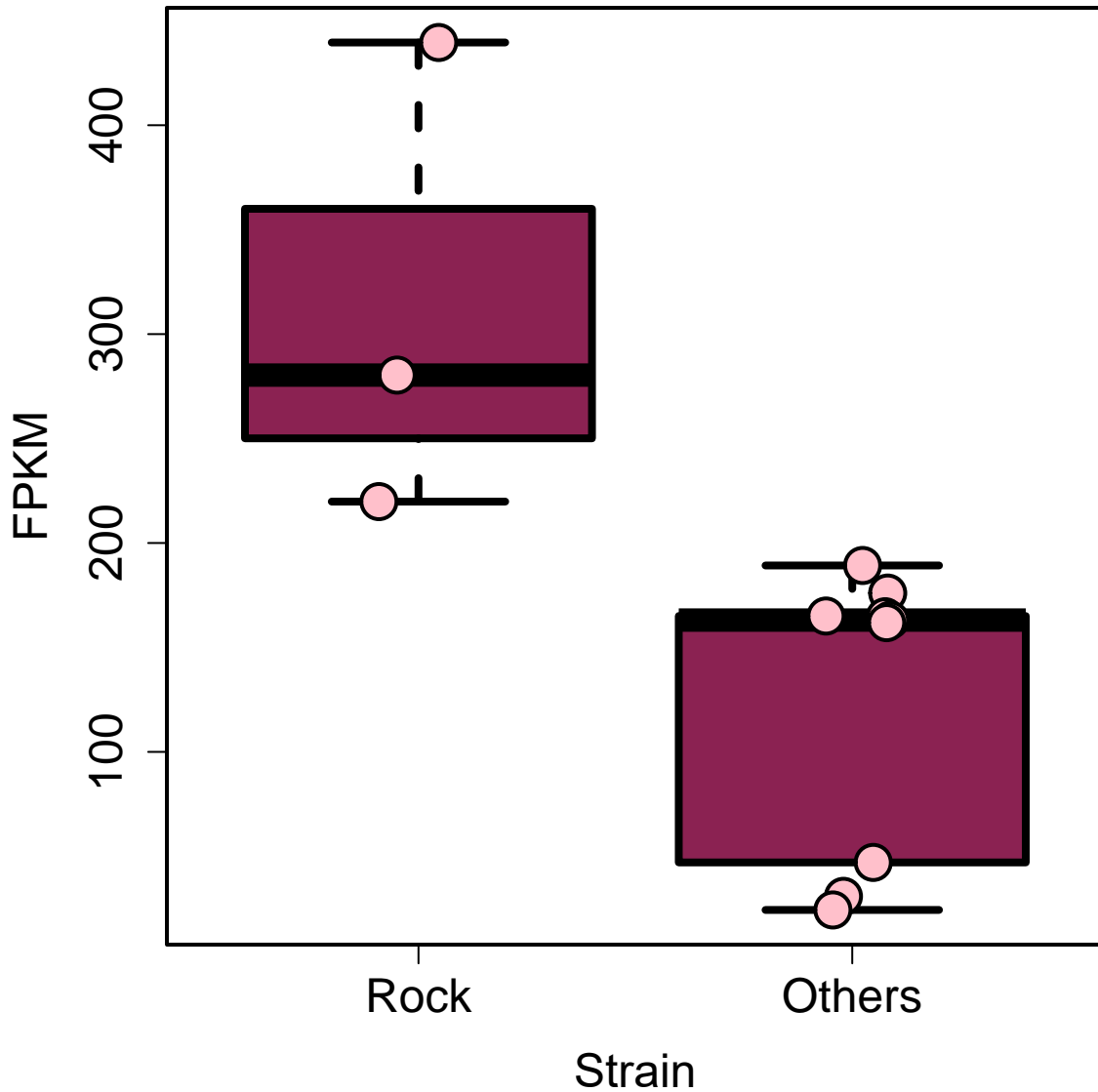
Fold Change: 2.3



Gene: AAEL004339 Description: *obp17*

P-value: 0.073638

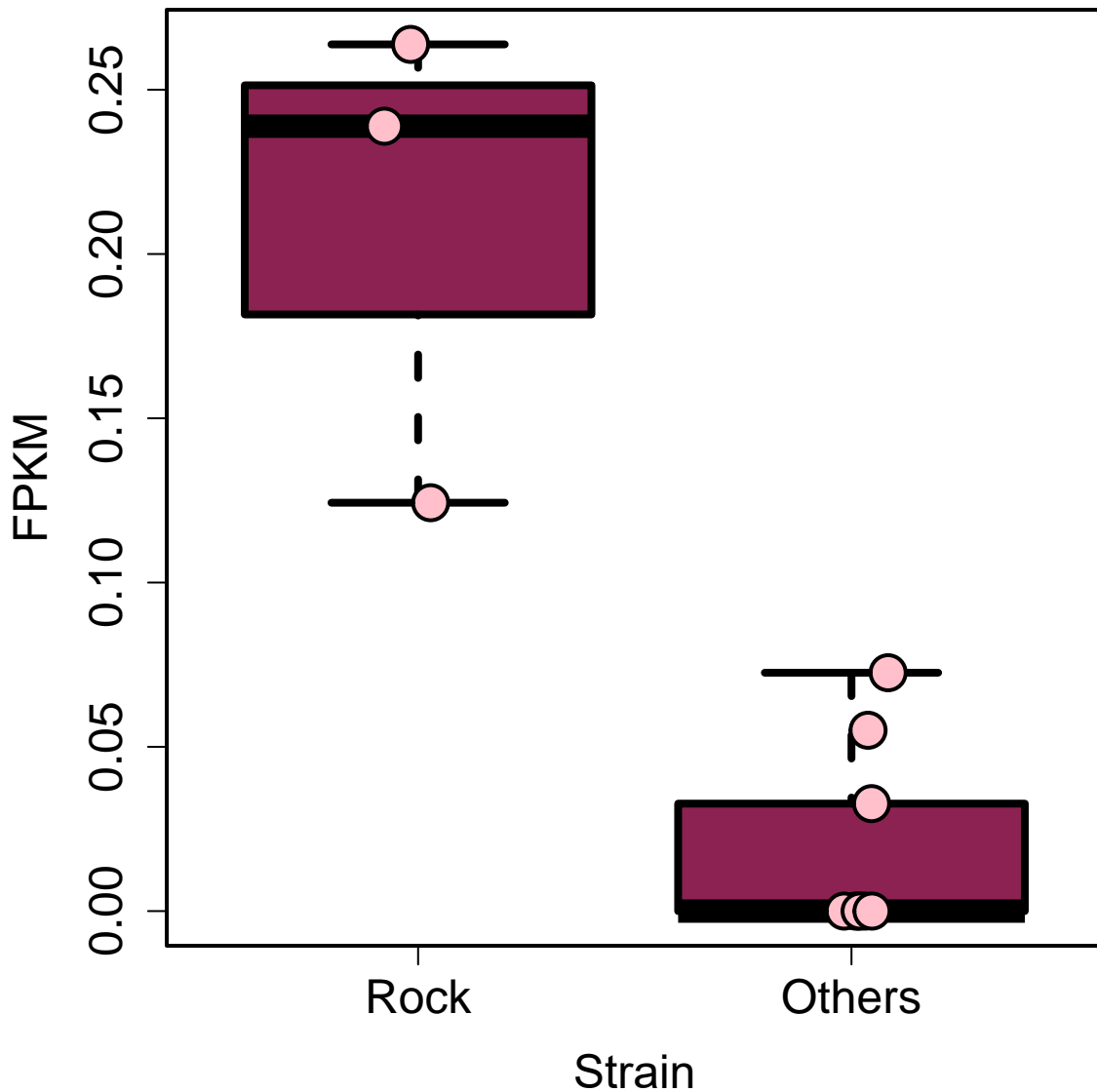
Fold Change: 2.51



Gene: AAEL025413 Description: putative odorant receptor (Or)

P-value: 0.073638

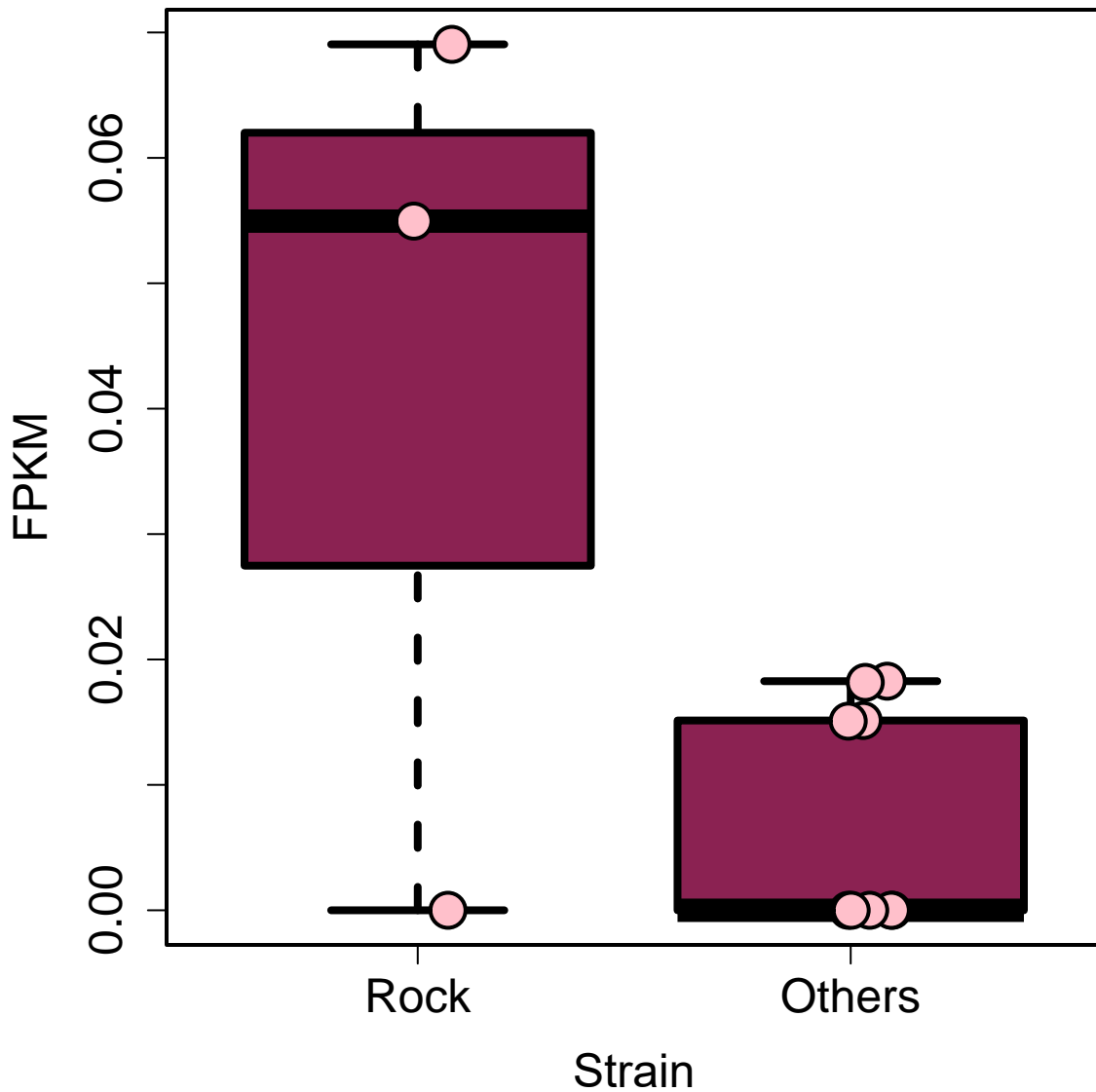
Fold Change: 11.7



Gene: AAEL000075 Description: *gr9*

P-value: 0.073638

Fold Change: 5.58

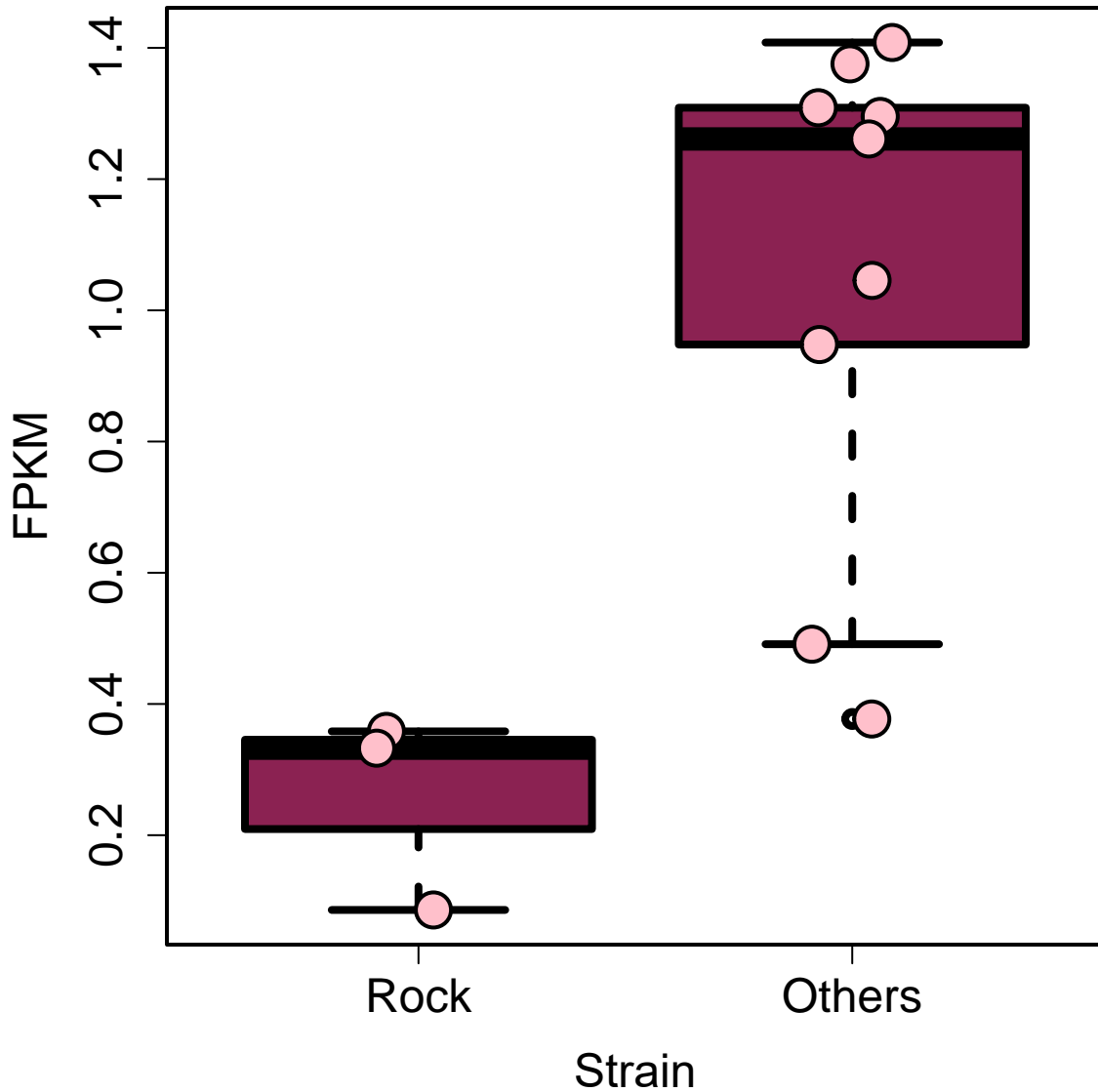




Gene: AAEL013418 Description: *or76*

P-value: 0.090969

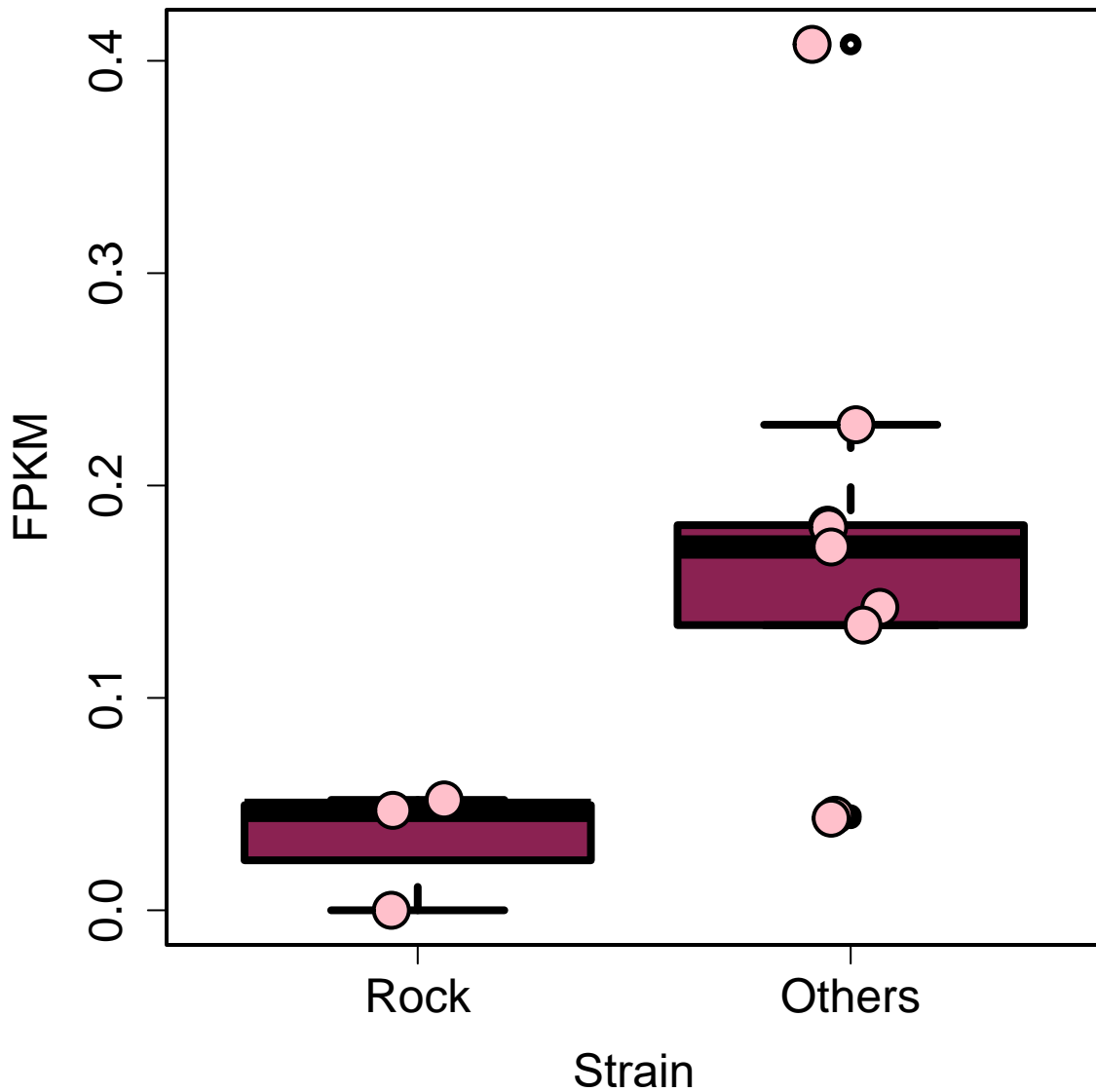
Fold Change: 0.245



Gene: AAEL022385 Description: putative pickpocket (ppk)

P-value: 0.090969

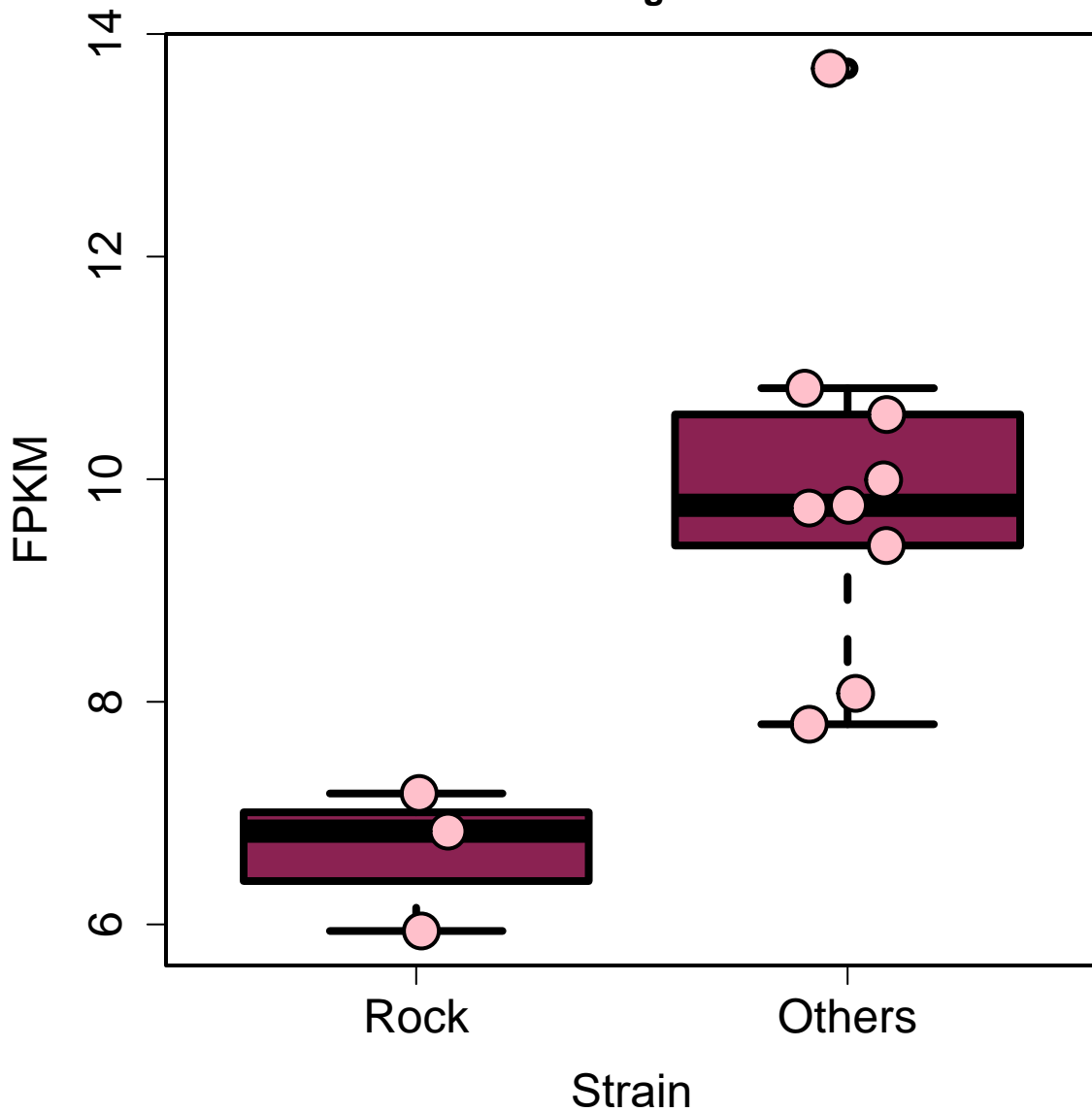
Fold Change: 0.194



Gene: AAEL008185 Description: Arrestin

P-value: 0.090969

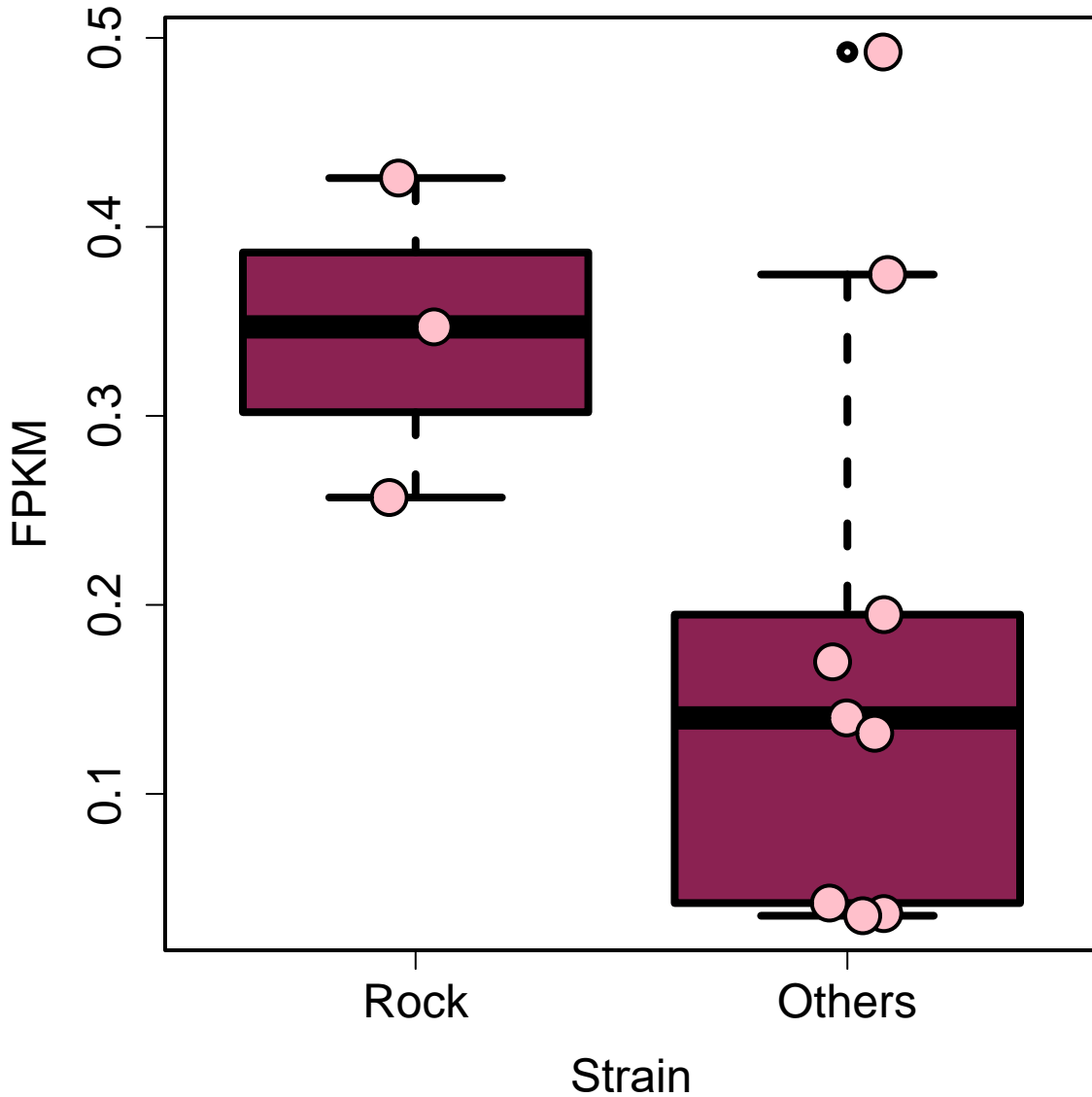
Fold Change: 0.666



Gene: AAEL017450 Description: *gr60*

P-value: 0.090969

Fold Change: 1.91



Gene: AAEL003989 Description: G-protein alpha (G\_Alpha)  
P-value: 0.090969  
Fold Change: 1.3

