# Analysis of Birth Ratios for Double Knockout Autophagy/Raptor Crosses

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# Experimental Design

This was for the second batch of C179-Gal4 + Raptor/Tsc1 knockdown crosses.

These data are stored in /Volumes/bridges\_lab/Hatfield/Drosophila/Births, with the raw data saved in ../Data/Double Knockout Birth Data.csv for the births. This script was most recently run on Mon Feb 24 09:30:50 2014.

### 24B-GAL4 Driver

This analysis is just for the C179 Driver.

These data are stored in /Volumes/bridges\_lab/Hatfield/Drosophila/Births, with the raw data saved in ../Data/Double Knockout Birth Data.csv. This script was most recently run on Mon Feb 24 09:30:50 2014

## Strain Summaries

Driver	UAS	Double_Knockdown	Raptor_Only	ATG_Only	Wild_Type	Total	pval	padj
24B	27551	0	0	67	47	114	0.00000	0.00000

Table 1: Gene Level Summarised Data

Driver	UAS	Gender	Double_Knockdown	Raptor_Only	ATG_Only	$Wild\_Type$	Total	pval	padj
24B	27551	Females	0	0	34	31	65	0.00000	0.00000
24B	27551	Males	0	0	33	16	49	0.00000	0.00000

Table 2: Gendered Gene Level Summarised Data

### Crosses with no Knockdown Progeny

So far some crosses have produced no knockdown progeny. These are described in Table 3

Driver	UAS	Gender	Double_Knockdown	Raptor_Only	ATG_Only

Table 3: Crosses with no Knockdown Flies

The key packages used in this analysis were R [1] and plyr [2]

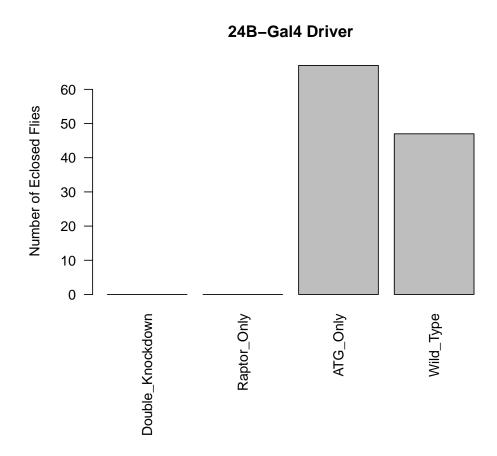


Figure 1: Gender Specific Differences Between C517-Gal4 Driven Raptor Knockdown Strains

# References

- [1] R Core Team. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria, 2013.
- [2] Hadley Wickham. The split-apply-combine strategy for data analysis. *Journal of Statistical Software*, 40(1):1–29, 2011.

# **Session Information**

- R version 3.0.2 (2013-09-25), x86\_64-apple-darwin10.8.0
- Locale: en\_US.UTF-8/en\_US.UTF-8/en\_US.UTF-8/C/en\_US.UTF-8/en\_US.UTF-8
- Base packages: base, datasets, graphics, grDevices, methods, stats, utils
- Other packages: bibtex 0.3-6, plyr 1.8, xtable 1.7-1
- Loaded via a namespace (and not attached): tools 3.0.2