

Untitled

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Study the effect of promoter, coding, and cg content on mutation rate. For promoters and coding windows, remove those that have “n/a” as gene names, for coding also remove utr

```
load("../analysis/161119_mutation_rate_calibration_2.Rdata")
```

258 control

```
control_model_258_summary
```

| ## | Estimate | Std. Error | z value | Pr(> z) |
|----------------|------------|------------|------------|--------------|
| ## (Intercept) | 0.3420736 | 0.0987237 | 3.464959 | 5.303119e-04 |
| ## coding | 0.1259754 | 0.1005675 | 1.252645 | 2.103348e-01 |
| ## promoter | -0.1951714 | 0.1306264 | -1.494119 | 1.351445e-01 |
| ## cg | -2.2436740 | 0.2180893 | -10.287868 | 7.992662e-25 |

manuscript cases

```
ASD_model_manuscript_summary
```

| ## | Estimate | Std. Error | z value | Pr(> z) |
|----------------|-------------|------------|------------|--------------|
| ## (Intercept) | 0.05831605 | 0.07344410 | 0.7940196 | 0.4271840302 |
| ## coding | 0.20751452 | 0.06544651 | 3.1707501 | 0.0015204588 |
| ## promoter | -0.21024447 | 0.08799983 | -2.3891464 | 0.0168875717 |
| ## cg | -0.57395305 | 0.15224742 | -3.7698705 | 0.0001633323 |

manuscript control

```
control_model_693_summary
```

| ## | Estimate | Std. Error | z value | Pr(> z) |
|----------------|--------------|------------|-------------|--------------|
| ## (Intercept) | -0.281413299 | 0.05941043 | -4.73676560 | 2.171561e-06 |
| ## coding | 0.357831797 | 0.05098383 | 7.01853552 | 2.242058e-12 |
| ## promoter | -0.004112942 | 0.06663336 | -0.06172496 | 9.507819e-01 |
| ## cg | -0.719811819 | 0.12361210 | -5.82314996 | 5.774869e-09 |

scherrer cases, partly overlapped with manuscript cases

ASD_model_Scherer_summary

| ## | Estimate | Std. Error | z value | Pr(> z) |
|----------------|------------|------------|-----------|--------------|
| ## (Intercept) | -0.1152721 | 0.10297037 | -1.119468 | 2.629403e-01 |
| ## coding | 0.3855092 | 0.08650837 | 4.456323 | 8.337741e-06 |
| ## promoter | -0.3116285 | 0.13118010 | -2.375577 | 1.752152e-02 |
| ## cg | -0.7237196 | 0.21452135 | -3.373648 | 7.417903e-04 |