# RELAX Combined Report
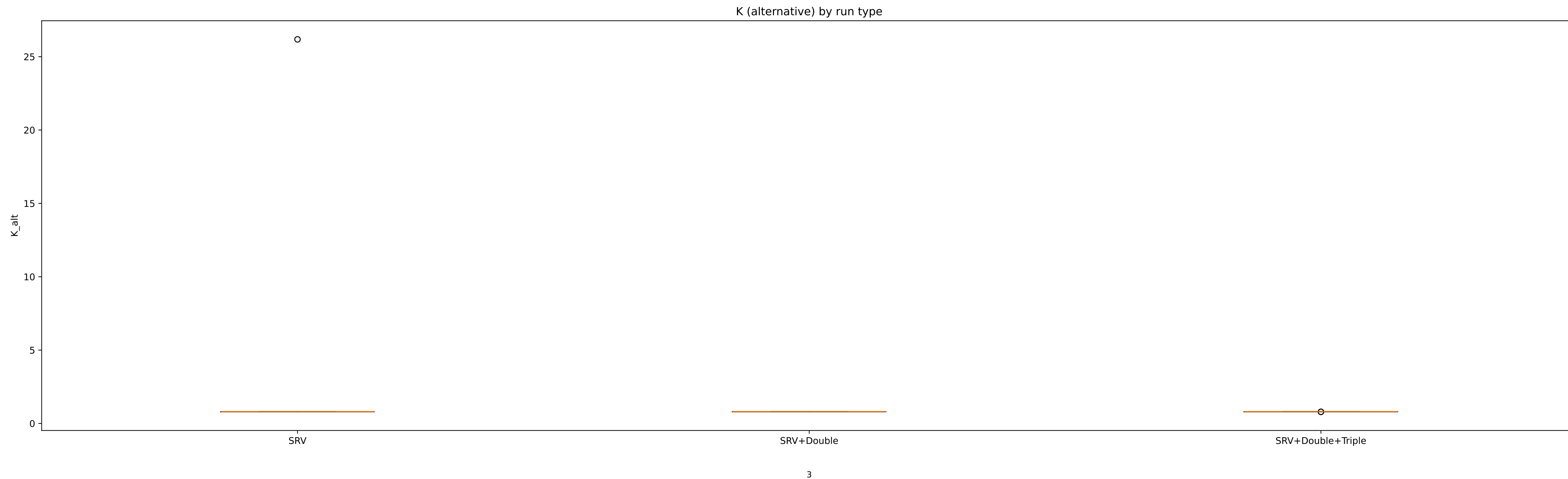
SRV vs SRV+Double vs SRV+Double+Triple
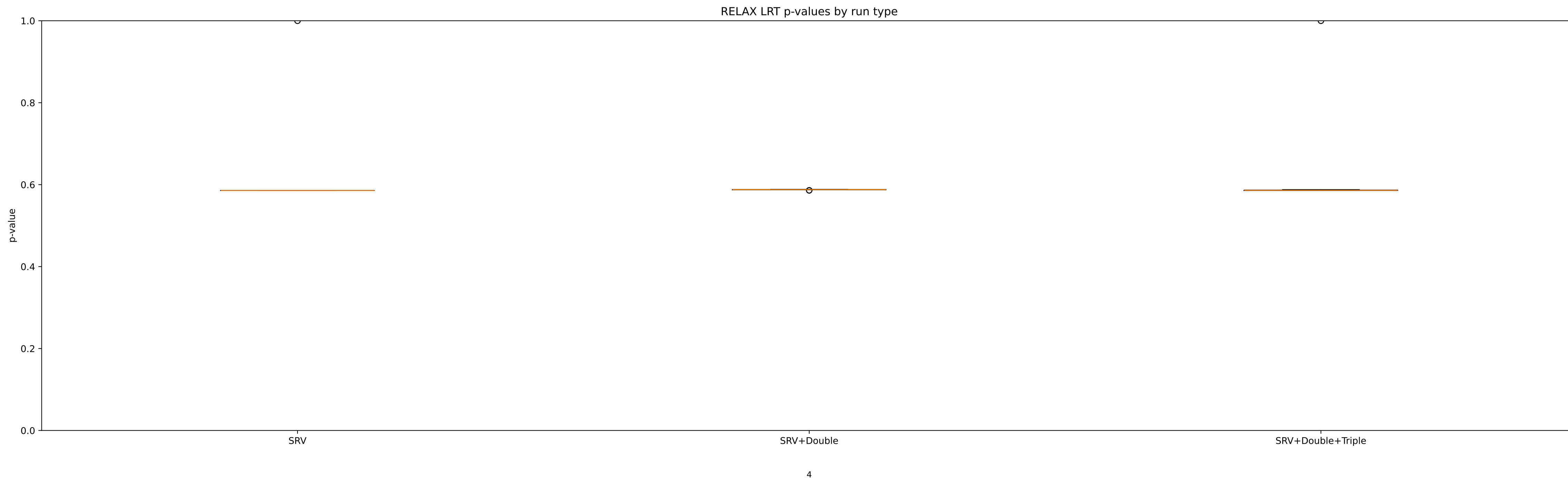
Includes:

- Run-type summary

- Boxplots: K, p-values, 2H/3H

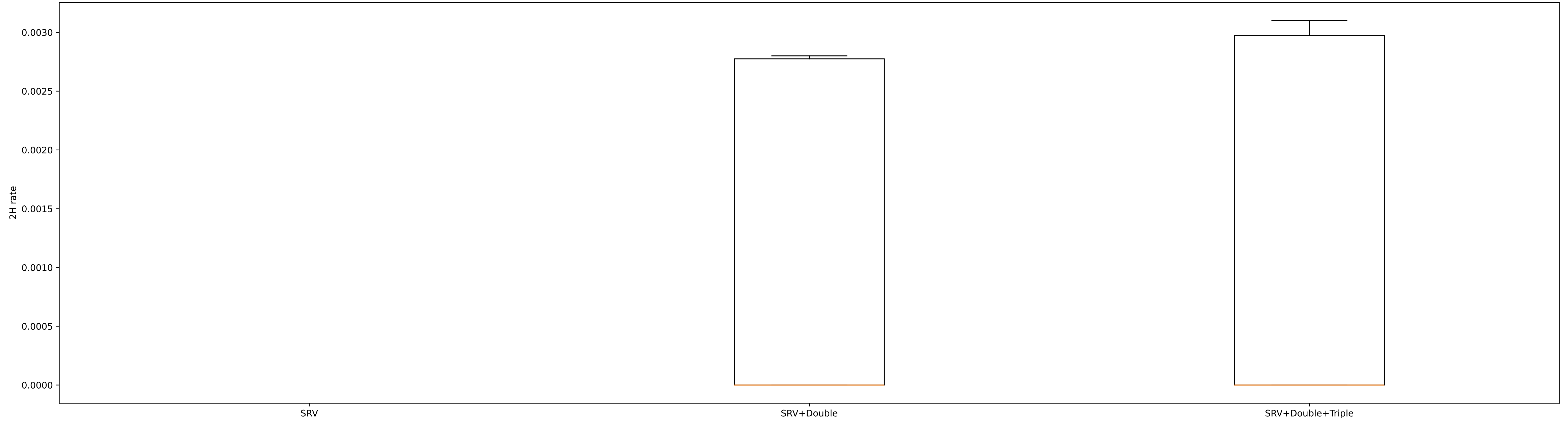- Full omega/SRV/multihit tables (column-paged)

# Run-type summary statistics

| p_median | p_min | p_max | K_median | K_min | K_max | omega_ref_median | omega_test_median | warnings_count | 2H_reference_median | 2H_test_median |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.5857 | 0.5856 | 1.0 | 0.8 | 0.8 | 26.18 | 0.2292 | 0.3058 | 10 | nan | nan |
| 0.5877 | 0.586 | 0.5882 | 0.8 | 0.8 | 0.8 | 0.2292 | 0.3058 | 10 | 0.0 | 0.0 |
| 0.586 | 0.5857 | 1.0 | 0.8 | 0.79 | 0.8 | 0.2292 | 0.3058 | 10 | 0.0 | 0.0 |

K (alternative) by run type

RELAX LRT p-values by run type

2H rates (reference) by run type

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2H rates (test) by run type

3H rates (reference) by run type

## 3H rates (test) by run type
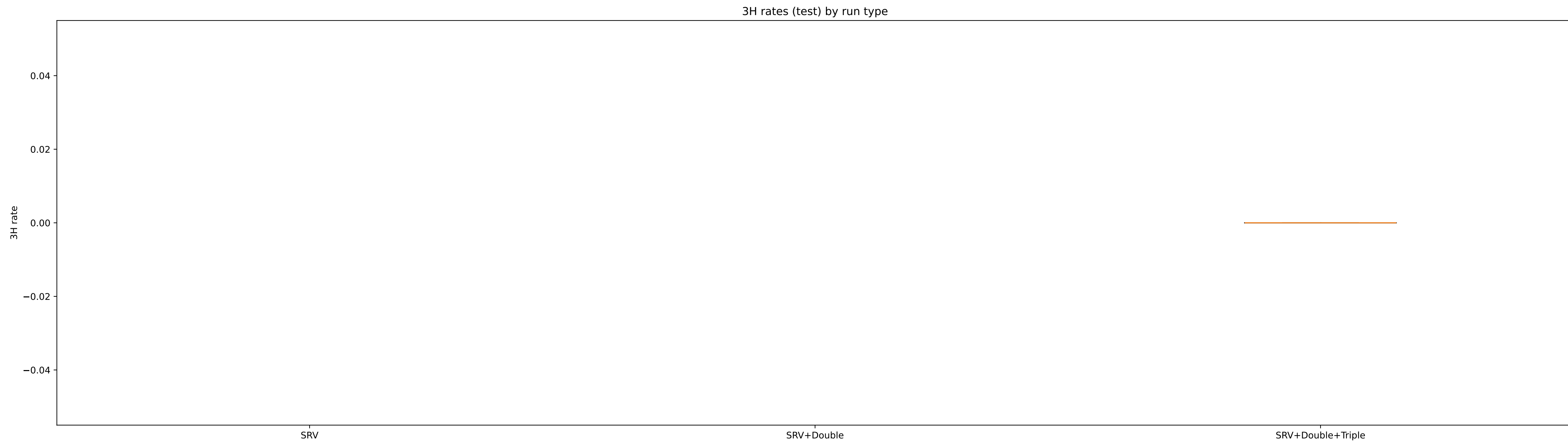
| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|---|
| | 1 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| | 2 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| | 3 | 0.5856 | 0.8 | 0.2292 | 0.3058 | |
| | 4 | 1.0 | 26.18 | 0.2292 | 0.3058 | |
| | 5 | 0.5858 | 0.8 | 0.2292 | 0.3058 | |
| | 6 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| | 7 | 0.5859 | 0.8 | 0.2292 | 0.3058 | |
| | 8 | 0.5858 | 0.8 | 0.2292 | 0.3058 | |
| | 9 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| | 10 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |

| replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|
| 1 | 0.5874 | 0.8 | 0.2292 | 0.3058 | |
| 2 | 0.5882 | 0.8 | 0.2292 | 0.3058 | |
| 3 | 0.586 | 0.8 | 0.2292 | 0.3058 | |
| 4 | 0.5879 | 0.8 | 0.2292 | 0.3058 | |
| 5 | 0.5881 | 0.8 | 0.2292 | 0.3058 | |
| 6 | 0.5861 | 0.8 | 0.2292 | 0.3058 | |
| 7 | 0.5875 | 0.8 | 0.2292 | 0.3058 | |
| 8 | 0.588 | 0.8 | 0.2292 | 0.3058 | |
| 9 | 0.5877 | 0.8 | 0.2292 | 0.3058 | |
| 10 | 0.5877 | 0.8 | 0.2292 | 0.3058 | |

| replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|
| 1 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| 2 | 0.5862 | 0.8 | 0.2292 | 0.3058 | |
| 3 | 0.5867 | 0.8 | 0.2292 | 0.3058 | |
| 4 | 0.586 | 0.79 | 0.2292 | 0.3058 | |
| 5 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| 6 | 0.5877 | 0.8 | 0.2292 | 0.3058 | |
| 7 | 0.5857 | 0.8 | 0.2292 | 0.3058 | |
| 8 | 0.5859 | 0.8 | 0.2292 | 0.3058 | |
| 9 | 1.0 | 0.79 | 0.2292 | 0.3058 | |
| 10 | 0.586 | 0.8 | 0.2292 | 0.3058 | |

| | | | | |
|---|---|---|---|---|
| test | Negative selection | 0.264 | 25.462 | SRV+Double |
| test | Negative selection | 0.32 | 74.538 | SRV+Double |
| test | Negative selection | 0.188 | 25.462 | SRV+Double |
| test | Negative selection | 0.239 | 74.538 | SRV+Double |
| reference | Diversifying selection | | 0.0 | SRV+Double |
| reference | Negative selection | 0.207 | 23.197 | SRV+Double |
| reference | Negative selection | 0.239 | 76.803 | SRV+Double |
| test | Diversifying selection | 1.155 | 0.0 | SRV+Double |
| test | Negative selection | 0.207 | 23.197 | SRV+Double |
| test | Negative selection | 0.239 | 76.803 | SRV+Double |
| reference | Diversifying selection | 1.026 | 0.0 | SRV+Double |
| reference | Negative selection | 0.193 | 43.381 | SRV+Double |
| reference | Negative selection | 0.251 | 56.619 | SRV+Double |
| test | Diversifying selection | 1.02 | 0.0 | SRV+Double |
| test | Diversifying selection | 1.026 | 0.0 | SRV+Double |
| test | Negative selection | 0.27 | 43.381 | SRV+Double |
| test | Negative selection | 0.333 | 56.619 | SRV+Double |
| test | Negative selection | 0.193 | 43.381 | SRV+Double |
| test | Negative selection | 0.251 | 56.619 | SRV+Double |
| reference | Diversifying selection | 1.08 | 0.0 | SRV+Double |
| reference | Negative selection | 0.206 | 42.259 | SRV+Double |
| reference | Negative selection | 0.251 | 57.741 | SRV+Double |
| test | Diversifying selection | 1.08 | 0.0 | SRV+Double |
| test | Negative selection | 0.206 | 42.259 | SRV+Double |
| test | Negative selection | 0.251 | 57.741 | SRV+Double |
| reference | Diversifying selection | 1.019 | 0.0 | SRV+Double |
| reference | Negative selection | 0.204 | 2.524 | SRV+Double |
| reference | Negative selection | 0.227 | 97.476 | SRV+Double |
| test | Diversifying selection | 1.015 | 0.0 | SRV+Double |
| test | Diversifying selection | 1.019 | 0.0 | SRV+Double |
| test | Negative selection | 0.282 | 2.524 | SRV+Double |
| test | Negative selection | 0.306 | 97.476 | SRV+Double |
| test | Negative selection | 0.204 | 2.524 | SRV+Double |
| test | Negative selection | 0.227 | 97.476 | SRV+Double |
| reference | Diversifying selection | 1.176 | 0.0 | SRV+Double |
| reference | Negative selection | 0.229 | 7.964 | SRV+Double |
| reference | Negative selection | 0.232 | 92.036 | SRV+Double |
| test | Diversifying selection | 1.176 | 0.0 | SRV+Double |
| test | Negative selection | 0.229 | 7.964 | SRV+Double |
| test | Negative selection | 0.232 | 92.036 | SRV+Double |
| reference | Diversifying selection | 1.261 | 0.0 | SRV+Double |
| reference | Negative selection | 0.188 | 19.456 | SRV+Double |
| reference | Negative selection | 0.235 | 80.544 | SRV+Double |
| test | Diversifying selection | 1.203 | 0.0 | SRV+Double |
| test | Diversifying selection | 1.261 | 0.0 | SRV+Double |
| test | Negative selection | 0.265 | 19.456 | SRV+Double |
| test | Negative selection | 0.316 | 80.544 | SRV+Double |
| test | Negative selection | 0.188 | 19.456 | SRV+Double |
| test | Negative selection | 0.235 | 80.544 | SRV+Double |
| reference | Diversifying selection | 1.233 | 0.0 | SRV+Double |

| class_id | syn_rate | proportion_percent | run_type |
|---|---|---|---|
| 1 | 0.0 | 50.405 | SRV |
| 2 | 1.827 | 0.0 | SRV |
| 3 | 2.016 | 49.595 | SRV |
| 1 | 0.0 | 13.525 | SRV |
| 2 | 0.0 | 36.879 | SRV |
| 3 | 2.016 | 49.596 | SRV |
| 1 | 0.0 | 14.924 | SRV |
| 2 | 0.0 | 35.478 | SRV |
| 3 | 2.016 | 49.598 | SRV |
| 1 | 0.0 | 13.024 | SRV |
| 2 | 0.0 | 37.383 | SRV |
| 3 | 2.016 | 49.594 | SRV |
| 1 | 0.0 | 8.409 | SRV |
| 2 | 0.0 | 41.996 | SRV |
| 3 | 2.016 | 49.596 | SRV |
| 1 | 0.0 | 11.987 | SRV |
| 2 | 0.0 | 38.417 | SRV |
| 3 | 2.016 | 49.596 | SRV |
| 1 | 0.0 | 50.404 | SRV |
| 2 | 2.016 | 20.075 | SRV |
| 3 | 2.016 | 29.521 | SRV |
| 1 | 0.0 | 10.191 | SRV |
| 2 | 0.0 | 40.213 | SRV |
| 3 | 2.016 | 49.596 | SRV |
| 1 | 0.0 | 10.635 | SRV |
| 2 | 0.0 | 39.768 | SRV |
| 3 | 2.016 | 49.597 | SRV |
| 1 | 0.0 | 12.463 | SRV |
| 2 | 0.0 | 37.941 | SRV |
| 3 | 2.016 | 49.596 | SRV |

Multihit (2H/3H) rates (all) (cols 1-6/6)

| | | | | | |
|---|---|---|---|---|---|
| | reference | 2H | 0.0028 | SRV+Double | |
| | reference | 2H | 0.0 | SRV+Double | |
| | test | 2H | 0.0 | SRV+Double | |
| | reference | 2H | 0.0 | SRV+Double | |
| | test | 2H | 0.0 | SRV+Double | |
| | reference | 2H | 0.003 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0031 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0031 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0029 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.003 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.0 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |