# RELAX Combined Report

SRV vs SRV+Double vs SRV+Double+Triple
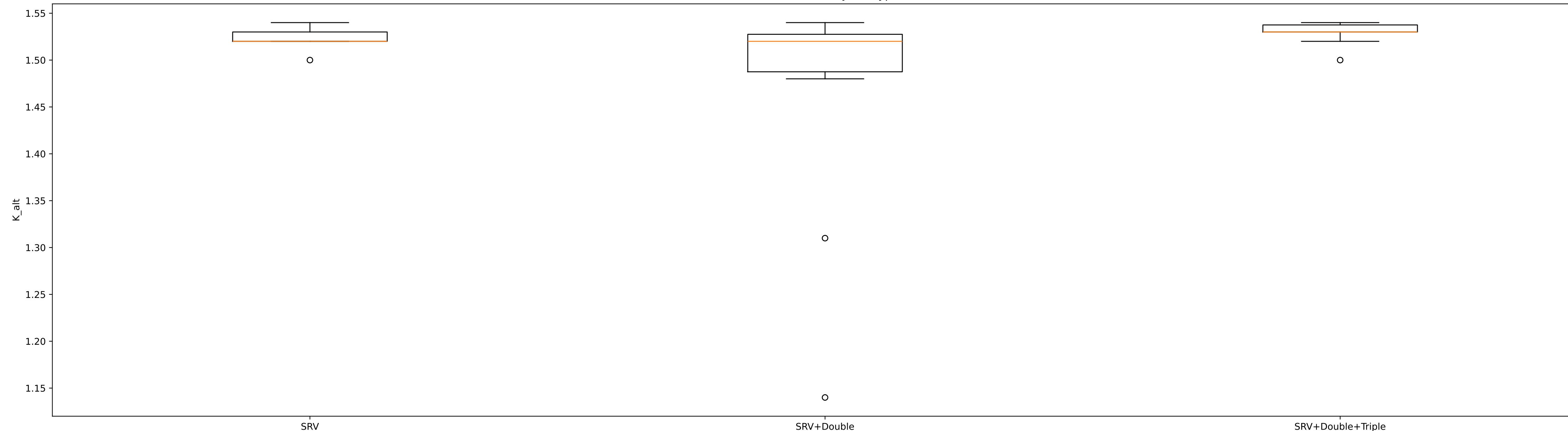
Includes:

- Run-type summary

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

- Full omega/SRV/multihit tables (column-paged)
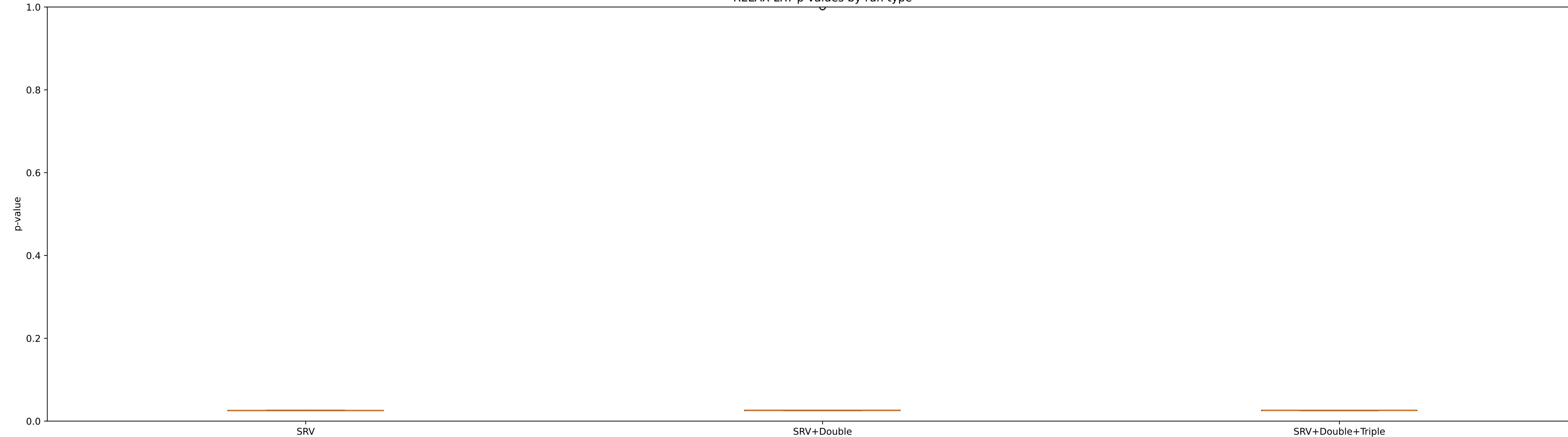
# Run-type summary statistics

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0255 | 0.0253 | 0.0261 | 1.52 | 1.5 | 1.54 | 0.1857 | 0.0826 | 10 | nan | nan |
| 0.0257 | 0.0254 | 1.0 | 1.52 | 1.14 | 1.54 | 0.1857 | 0.0826 | 10 | 0.0028 | 0.0 |
| 0.0258 | 0.0254 | 0.0261 | 1.53 | 1.5 | 1.54 | 0.1857 | 0.0826 | 10 | 0.0004 | 0.0 |
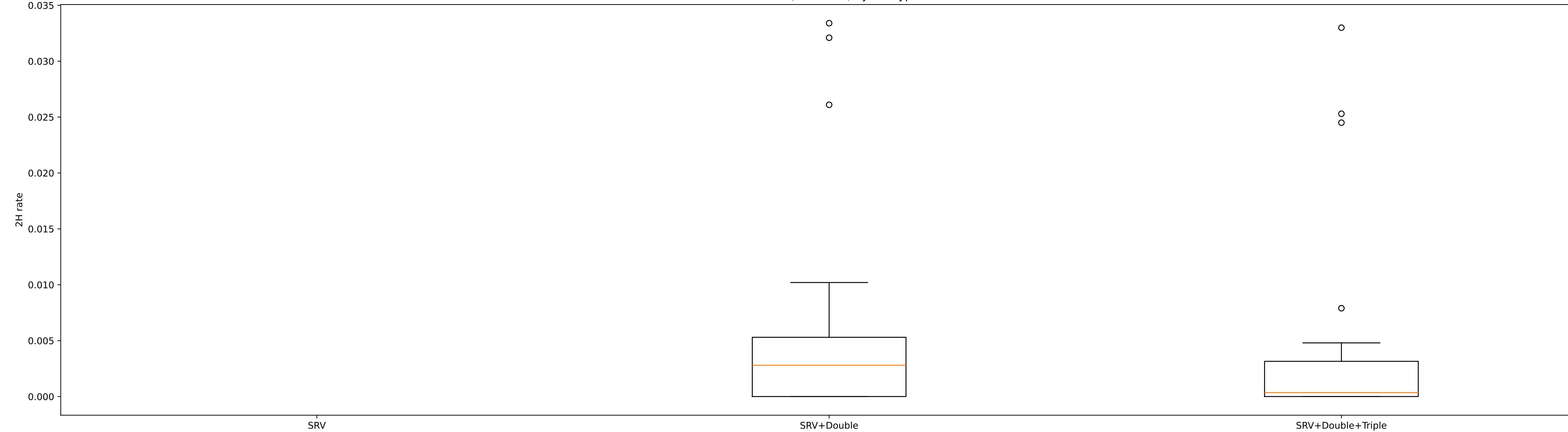
K (alternative) by run type

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RELAX LRT p-values by run type

2H rates (reference) by run type
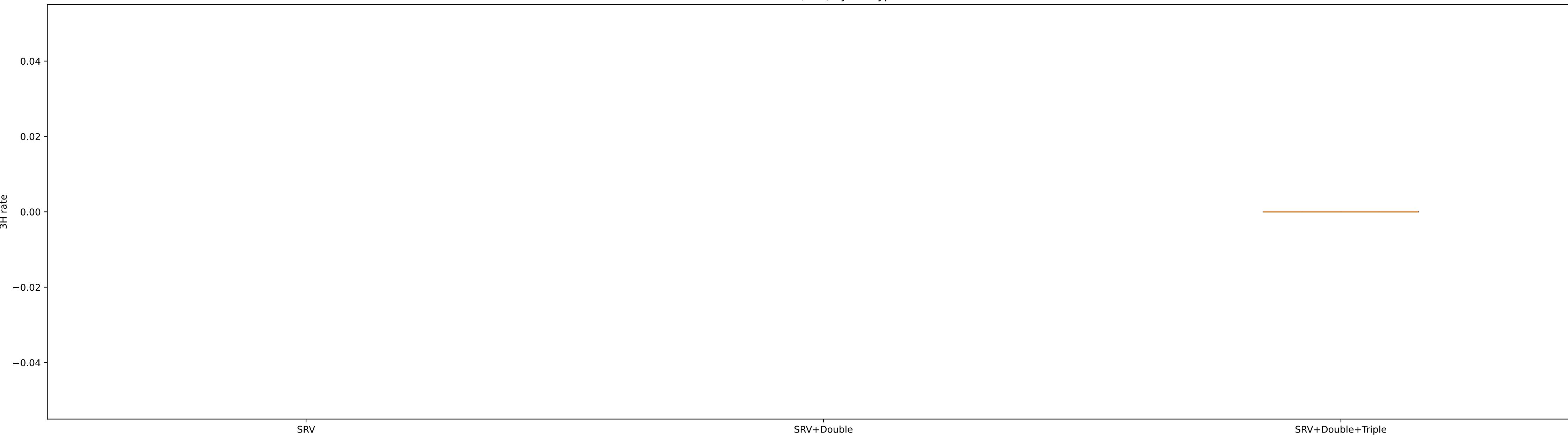
2H rates (test) by run type

# 3H rates (reference) by run type



SRV                SRV+Double                SRV+Double+Triple

3H rates (test) by run type

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|---|
| | 1 | 0.0254 | 1.52 | 0.1857 | 0.0826 | |
| | 2 | 0.0254 | 1.52 | 0.1857 | 0.0826 | |
| | 3 | 0.0255 | 1.52 | 0.1857 | 0.0826 | |
| | 4 | 0.0255 | 1.52 | 0.1857 | 0.0826 | |
| | 5 | 0.0259 | 1.54 | 0.1857 | 0.0826 | |
| | 6 | 0.0261 | 1.5 | 0.1857 | 0.0826 | |
| | 7 | 0.0259 | 1.54 | 0.1857 | 0.0826 | |
| | 8 | 0.0255 | 1.53 | 0.1857 | 0.0826 | |
| | 9 | 0.0253 | 1.52 | 0.1857 | 0.0826 | |
| | 10 | 0.0255 | 1.53 | 0.1857 | 0.0826 | |

Replicate-level summary — SRV+Double (page 1/1)

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|---|
| | 1 | 0.0254 | 1.52 | 0.1857 | 0.0826 | |
| | 2 | 1.0 | 1.14 | 0.1857 | 0.0826 | |
| | 3 | 0.0257 | 1.52 | 0.1857 | 0.0826 | |
| | 4 | 0.0257 | 1.53 | 0.1858 | 0.0827 | |
| | 5 | 1.0 | 1.31 | 0.1857 | 0.0826 | |
| | 6 | 0.026 | 1.54 | 0.1857 | 0.0829 | |
| | 7 | 0.0256 | 1.53 | 0.1857 | 0.0826 | |
| | 8 | 0.0257 | 1.51 | 0.1857 | 0.0826 | |
| | 9 | 0.0262 | 1.48 | 0.1857 | 0.0826 | |
| | 10 | 0.0256 | 1.52 | 0.1857 | 0.0826 | |

| replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|---|---|---|---|---|---|
| 1 | 0.0258 | 1.53 | 0.1857 | 0.0826 | |
| 2 | 0.0261 | 1.5 | 0.1857 | 0.0826 | |
| 3 | 0.0254 | 1.52 | 0.1857 | 0.0826 | |
| 4 | 0.026 | 1.54 | 0.1857 | 0.0826 | |
| 5 | 0.0258 | 1.53 | 0.1857 | 0.0826 | |
| 6 | 0.0255 | 1.53 | 0.1857 | 0.0826 | |
| 7 | 0.0258 | 1.53 | 0.1857 | 0.0826 | |
| 8 | 0.0261 | 1.54 | 0.1857 | 0.0826 | |
| 9 | 0.026 | 1.54 | 0.1857 | 0.0826 | |
| 10 | 0.0256 | 1.53 | 0.1857 | 0.0826 | |

| | | | | |
|---|---|---|---|---|
| test | Negative selection | 0.059 | 93.129 | SRV+Double |
| test | Negative selection | 0.31 | 6.65 | SRV+Double |
| test | Negative selection | 0.156 | 93.129 | SRV+Double |
| test | Negative selection | 0.464 | 6.65 | SRV+Double |
| reference | Diversifying selection | 0.046 | 0.0 | SRV+Double |
| reference | Negative selection | 0.149 | 93.229 | SRV+Double |
| reference | Negative selection | 0.43 | 6.771 | SRV+Double |
| test | Diversifying selection | 1.006 | 0.0 | SRV+Double |
| test | Negative selection | 0.149 | 93.229 | SRV+Double |
| test | Negative selection | 0.43 | 6.771 | SRV+Double |
| reference | Diversifying selection | 1.069 | 0.472 | SRV+Double |
| reference | Negative selection | 0.152 | 87.018 | SRV+Double |
| reference | Negative selection | 0.342 | 12.51 | SRV+Double |
| test | Diversifying selection | 1.092 | 0.472 | SRV+Double |
| test | Diversifying selection | 1.069 | 0.472 | SRV+Double |
| test | Negative selection | 0.0 | 12.51 | SRV+Double |
| test | Negative selection | 0.085 | 87.018 | SRV+Double |
| test | Negative selection | 0.152 | 87.018 | SRV+Double |
| test | Negative selection | 0.342 | 12.51 | SRV+Double |
| reference | Negative selection | 0.122 | 61.433 | SRV+Double |
| reference | Negative selection | 0.264 | 38.176 | SRV+Double |
| reference | Neutral evolution | 1.0 | 0.391 | SRV+Double |
| test | Negative selection | 0.122 | 61.433 | SRV+Double |
| test | Negative selection | 0.264 | 38.176 | SRV+Double |
| test | Neutral evolution | 1.0 | 0.391 | SRV+Double |
| reference | Negative selection | 0.033 | 21.073 | SRV+Double |
| reference | Negative selection | 0.216 | 78.66 | SRV+Double |
| reference | Neutral evolution | 1.0 | 0.267 | SRV+Double |
| test | Negative selection | 0.005 | 21.073 | SRV+Double |
| test | Negative selection | 0.095 | 78.66 | SRV+Double |
| test | Negative selection | 0.033 | 21.073 | SRV+Double |
| test | Negative selection | 0.216 | 78.66 | SRV+Double |
| test | Neutral evolution | 1.0 | 0.267 | SRV+Double |
| test | Neutral evolution | 1.0 | 0.267 | SRV+Double |
| reference | Diversifying selection | 1.011 | 0.0 | SRV+Double |
| reference | Negative selection | 0.029 | 22.875 | SRV+Double |
| reference | Negative selection | 0.21 | 77.125 | SRV+Double |
| test | Diversifying selection | 1.011 | 0.0 | SRV+Double |
| test | Negative selection | 0.029 | 22.875 | SRV+Double |
| test | Negative selection | 0.21 | 77.125 | SRV+Double |
| reference | Diversifying selection | 1.052 | 0.742 | SRV+Double |
| reference | Negative selection | 0.159 | 94.139 | SRV+Double |
| reference | Negative selection | 0.418 | 5.119 | SRV+Double |
| test | Diversifying selection | 1.08 | 0.742 | SRV+Double |
| test | Diversifying selection | 1.052 | 0.742 | SRV+Double |
| test | Negative selection | 0.061 | 94.139 | SRV+Double |
| test | Negative selection | 0.264 | 5.119 | SRV+Double |
| test | Negative selection | 0.159 | 94.139 | SRV+Double |
| test | Negative selection | 0.418 | 5.119 | SRV+Double |
| reference | Negative selection | 0.153 | 94.752 | SRV+Double |

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| | class_id | syn_rate | proportion_per cent | run_type | |
|---|---|---|---|---|---|
| | 1 | 0.264 | 28.465 | SRV | |
| | 2 | 0.468 | 28.807 | SRV | |
| | 3 | 1.849 | 42.728 | SRV | |
| | 1 | 0.259 | 34.139 | SRV | |
| | 2 | 0.565 | 24.342 | SRV | |
| | 3 | 1.864 | 41.518 | SRV | |
| | 1 | 0.265 | 24.463 | SRV | |
| | 2 | 0.433 | 32.447 | SRV | |
| | 3 | 1.844 | 43.09 | SRV | |
| | 1 | 0.285 | 31.509 | SRV | |
| | 2 | 0.455 | 25.399 | SRV | |
| | 3 | 1.844 | 43.092 | SRV | |
| | 1 | 0.295 | 33.453 | SRV | |
| | 2 | 0.447 | 23.198 | SRV | |
| | 3 | 1.84 | 43.349 | SRV | |
| | 1 | 0.304 | 32.405 | SRV | |
| | 2 | 0.423 | 24.139 | SRV | |
| | 3 | 1.839 | 43.456 | SRV | |
| | 1 | 0.279 | 31.023 | SRV | |
| | 2 | 0.463 | 26.02 | SRV | |
| | 3 | 1.846 | 42.957 | SRV | |
| | 1 | 0.245 | 32.257 | SRV | |
| | 2 | 0.572 | 26.631 | SRV | |
| | 3 | 1.87 | 41.112 | SRV | |
| | 1 | 0.254 | 28.753 | SRV | |
| | 2 | 0.489 | 28.769 | SRV | |
| | 3 | 1.851 | 42.478 | SRV | |
| | 1 | 0.276 | 30.186 | SRV | |
| | 2 | 0.462 | 26.875 | SRV | |
| | 3 | 1.846 | 42.94 | SRV | |

| | | | | |
|---|---|---|---|---|
| reference | 2H | 0.0 | SRV+Double |
| test | 2H | 0.0 | SRV+Double |
| reference | 2H | 0.0073 | SRV+Double |
| reference | 2H | 0.0028 | SRV+Double |
| test | 2H | 0.0 | SRV+Double |
| 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 | 0.0017 | SRV+Double+Triple |
| reference | 2H | 0.0004 | 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 | 2H | 0.0033 | 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 | 0.0079 | SRV+Double+Triple |
| reference | 2H | 0.0033 | 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 | 0.0029 | 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 | 0.0048 | SRV+Double+Triple |
| reference | 2H | 0.0008 | 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 | 0.0245 | 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 |