

RELAX Combined Report

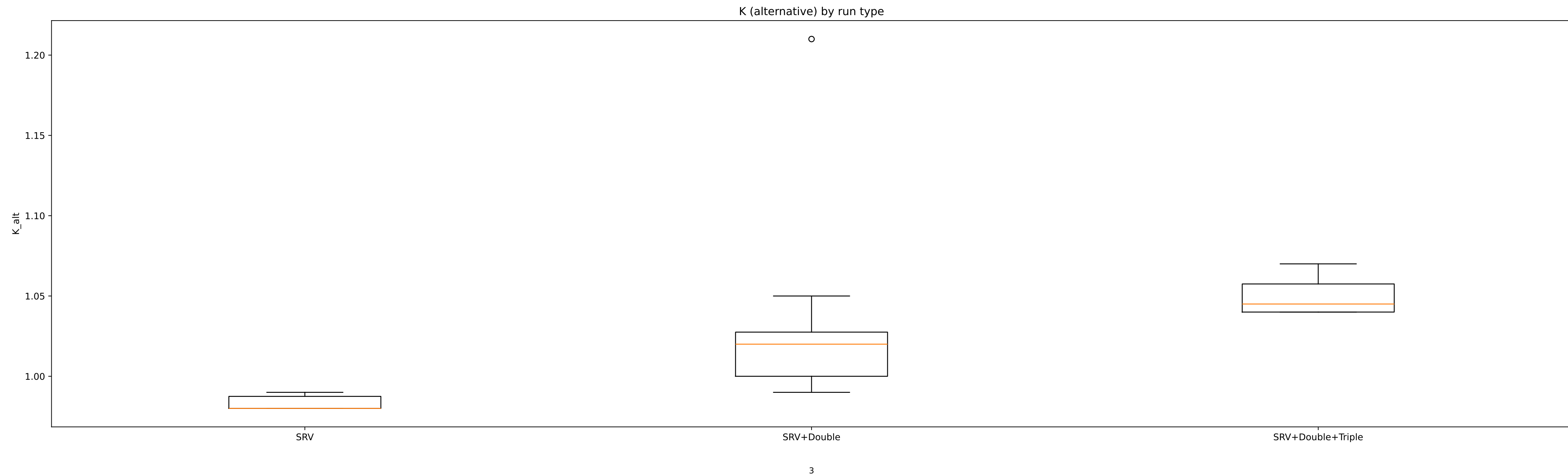
SRV vs SRV+Double vs SRV+Double+Triple

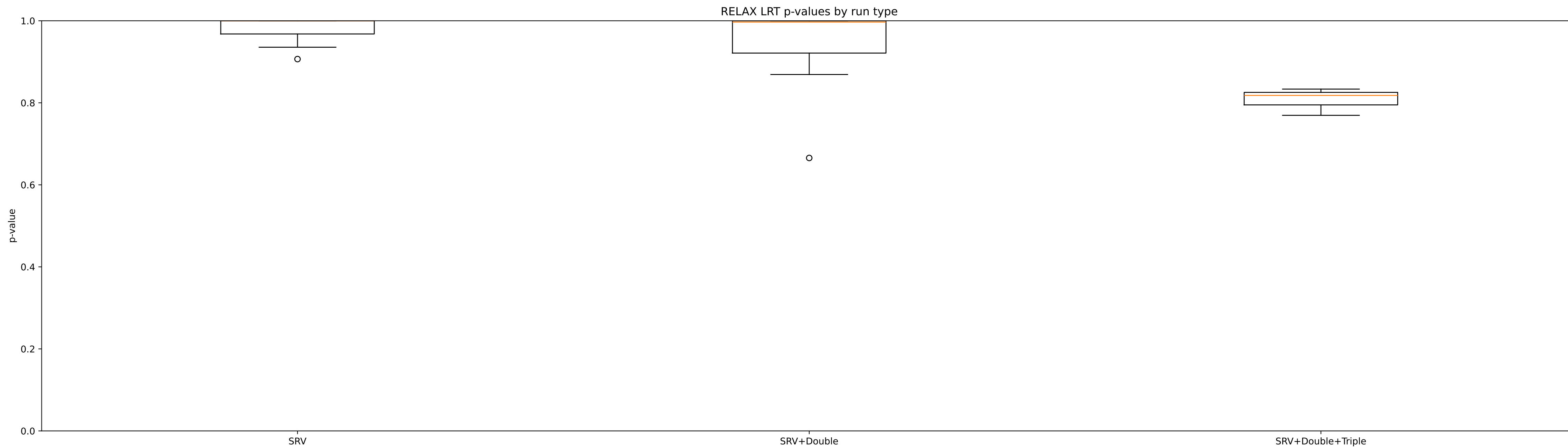
Includes:

- Run-type summary
- Boxplots: K, p-values, 2H/3H
- Full omega/SRV/multihit tables (column-paged)

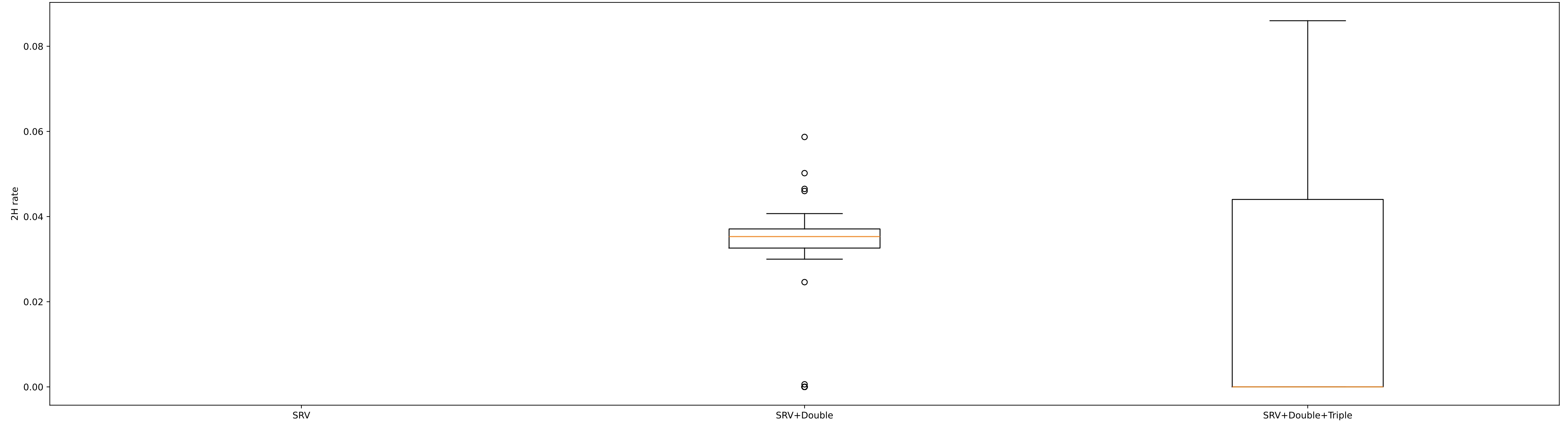
Run-type summary statistics

| p_median | p_min | p_max | K_median | K_min | K_max | omega_ref_med ian | omega_test_med ian | warnings_count | 2H_reference_m edian | 2H_test_median |
|----------|--------|--------|----------|-------|-------|----------------------|-----------------------|----------------|-------------------------|----------------|
| 1.0 | 0.9066 | 1.0 | 0.98 | 0.98 | 0.99 | 0.2347 | 0.2107 | 10 | nan | nan |
| 0.9968 | 0.6655 | 1.0 | 1.02 | 0.99 | 1.21 | 0.2347 | 0.2107 | 10 | 0.0353 | 0.0 |
| 0.818 | 0.7694 | 0.8334 | 1.045 | 1.04 | 1.07 | 0.2347 | 0.2107 | 10 | 0.0 | 0.0 |



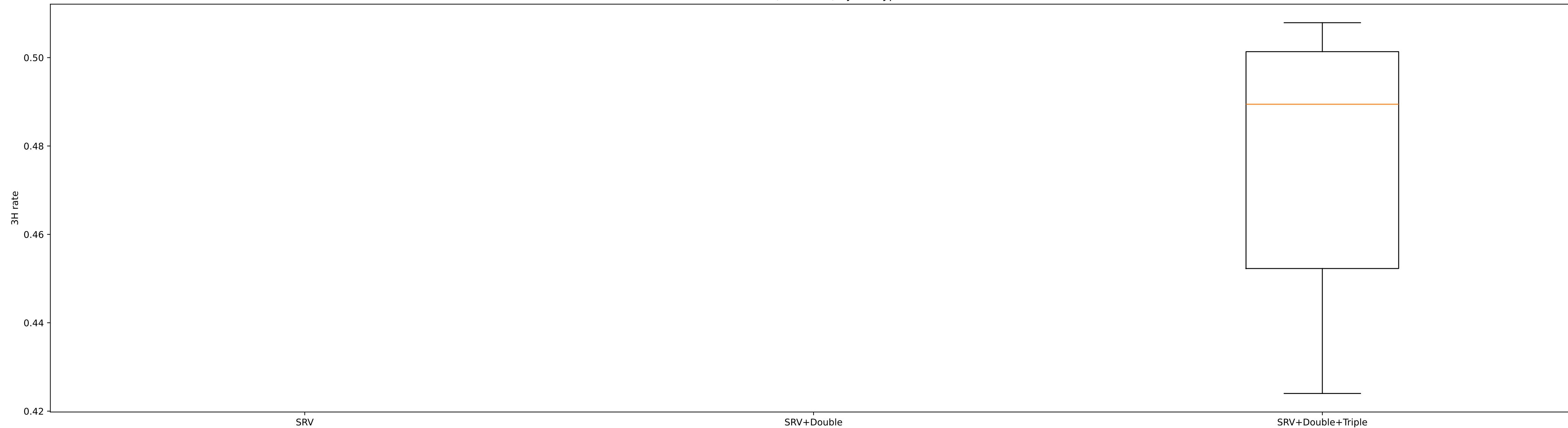


2H rates (reference) by run type





3H rates (reference) by run type



3H rates (test) by run type



| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|--|-----------|---------|-------|-----------------------|------------------|--|
| | 1 | 1.0 | 0.98 | 0.2347 | 0.2107 | |
| | 2 | 0.9672 | 0.98 | 0.2347 | 0.2107 | |
| | 3 | 1.0 | 0.98 | 0.2347 | 0.2107 | |
| | 4 | 1.0 | 0.99 | 0.2347 | 0.2107 | |
| | 5 | 0.9066 | 0.98 | 0.2347 | 0.2107 | |
| | 6 | 0.9699 | 0.99 | 0.2347 | 0.2107 | |
| | 7 | 1.0 | 0.99 | 0.2347 | 0.2107 | |
| | 8 | 1.0 | 0.98 | 0.2347 | 0.2107 | |
| | 9 | 0.9355 | 0.98 | 0.2347 | 0.2107 | |
| | 10 | 1.0 | 0.98 | 0.2347 | 0.2107 | |

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|--|-----------|---------|-------|-----------------------|------------------|--|
| | 1 | 1.0 | 1.0 | 0.2347 | 0.2107 | |
| | 2 | 0.9246 | 1.02 | 0.2347 | 0.2107 | |
| | 3 | 0.9936 | 0.99 | 0.2347 | 0.2107 | |
| | 4 | 1.0 | 1.0 | 0.2347 | 0.2107 | |
| | 5 | 1.0 | 1.02 | 0.2347 | 0.2107 | |
| | 6 | 1.0 | 1.02 | 0.2347 | 0.2107 | |
| | 7 | 0.9201 | 1.03 | 0.2347 | 0.2107 | |
| | 8 | 1.0 | 1.0 | 0.2347 | 0.2107 | |
| | 9 | 0.6655 | 1.21 | 0.2347 | 0.2107 | |
| | 10 | 0.869 | 1.05 | 0.2347 | 0.2107 | |

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test | |
|--|-----------|---------|-------|-----------------------|------------------|--|
| | 1 | 0.8274 | 1.04 | 0.2347 | 0.2107 | |
| | 2 | 0.7761 | 1.07 | 0.2347 | 0.2107 | |
| | 3 | 0.8071 | 1.05 | 0.2347 | 0.2107 | |
| | 4 | 0.8334 | 1.04 | 0.2347 | 0.2107 | |
| | 5 | 0.7909 | 1.06 | 0.2347 | 0.2107 | |
| | 6 | 0.7694 | 1.07 | 0.2347 | 0.2107 | |
| | 7 | 0.8213 | 1.04 | 0.2347 | 0.2107 | |
| | 8 | 0.8186 | 1.05 | 0.2347 | 0.2107 | |
| | 9 | 0.8268 | 1.04 | 0.2347 | 0.2107 | |
| | 10 | 0.8174 | 1.04 | 0.2347 | 0.2107 | |

| | | | | | | |
|--|-----------|------------------------|-------|--------|------------|--|
| | test | Negative selection | 0.095 | 82.92 | SRV+Double | |
| | test | Negative selection | 0.931 | 17.08 | SRV+Double | |
| | test | Neutral evolution | 1.0 | 0.0 | SRV+Double | |
| | test | Neutral evolution | 1.0 | 0.0 | SRV+Double | |
| | reference | Diversifying selection | 4.468 | 0.0 | SRV+Double | |
| | reference | Negative selection | 0.095 | 82.925 | SRV+Double | |
| | reference | Negative selection | 0.931 | 17.075 | SRV+Double | |
| | test | Diversifying selection | 6.468 | 0.0 | SRV+Double | |
| | test | Negative selection | 0.095 | 82.925 | SRV+Double | |
| | test | Negative selection | 0.931 | 17.075 | SRV+Double | |
| | reference | Diversifying selection | 3.086 | 0.0 | SRV+Double | |
| | reference | Negative selection | 0.074 | 77.363 | SRV+Double | |
| | reference | Negative selection | 0.799 | 22.637 | SRV+Double | |
| | test | Diversifying selection | 3.146 | 0.0 | SRV+Double | |
| | test | Diversifying selection | 3.086 | 0.0 | SRV+Double | |
| | test | Negative selection | 0.07 | 77.363 | SRV+Double | |
| | test | Negative selection | 0.796 | 22.637 | SRV+Double | |
| | test | Negative selection | 0.074 | 77.363 | SRV+Double | |
| | test | Negative selection | 0.799 | 22.637 | SRV+Double | |
| | reference | Diversifying selection | 2.125 | 0.0 | SRV+Double | |
| | reference | Negative selection | 0.067 | 76.512 | SRV+Double | |
| | reference | Negative selection | 0.79 | 23.488 | SRV+Double | |
| | test | Diversifying selection | 2.125 | 0.0 | SRV+Double | |
| | test | Negative selection | 0.067 | 76.512 | SRV+Double | |
| | test | Negative selection | 0.79 | 23.488 | SRV+Double | |
| | reference | Diversifying selection | 3.973 | 0.0 | SRV+Double | |
| | reference | Negative selection | 0.077 | 77.968 | SRV+Double | |
| | reference | Negative selection | 0.81 | 22.032 | SRV+Double | |
| | test | Diversifying selection | 4.075 | 0.0 | SRV+Double | |
| | test | Diversifying selection | 3.973 | 0.0 | SRV+Double | |
| | test | Negative selection | 0.073 | 77.968 | SRV+Double | |
| | test | Negative selection | 0.807 | 22.032 | SRV+Double | |
| | test | Negative selection | 0.077 | 77.968 | SRV+Double | |
| | test | Negative selection | 0.81 | 22.032 | SRV+Double | |
| | reference | Diversifying selection | 2.64 | 0.0 | SRV+Double | |
| | reference | Negative selection | 0.069 | 76.954 | SRV+Double | |
| | reference | Negative selection | 0.797 | 23.046 | SRV+Double | |
| | test | Diversifying selection | 2.64 | 0.0 | SRV+Double | |
| | test | Negative selection | 0.069 | 76.954 | SRV+Double | |
| | test | Negative selection | 0.797 | 23.046 | SRV+Double | |
| | reference | Negative selection | 0.0 | 45.06 | SRV+Double | |
| | reference | Negative selection | 0.27 | 42.462 | SRV+Double | |
| | reference | Neutral evolution | 1.0 | 12.477 | SRV+Double | |
| | test | Negative selection | 0.0 | 45.06 | SRV+Double | |
| | test | Negative selection | 0.26 | 42.462 | SRV+Double | |
| | test | Negative selection | 0.0 | 45.06 | SRV+Double | |
| | test | Negative selection | 0.27 | 42.462 | SRV+Double | |
| | test | Neutral evolution | 1.0 | 12.477 | SRV+Double | |
| | test | Neutral evolution | 1.0 | 12.477 | SRV+Double | |
| | reference | Negative selection | 0.0 | 45.235 | SRV+Double | |

SRV rate classes (all) (cols 1-6/6)

| | class_id | syn_rate | proportion_per cent | run_type | |
|--|----------|----------|---------------------|----------|--|
| | 1 | 0.0 | 7.444 | SRV | |
| | 2 | 1.08 | 89.583 | SRV | |
| | 3 | 1.08 | 2.973 | SRV | |
| | 1 | 0.0 | 7.377 | SRV | |
| | 2 | 1.08 | 1.522 | SRV | |
| | 3 | 1.08 | 91.102 | SRV | |
| | 1 | 0.0 | 7.434 | SRV | |
| | 2 | 1.08 | 4.327 | SRV | |
| | 3 | 1.08 | 88.239 | SRV | |
| | 1 | 0.0 | 0.084 | SRV | |
| | 2 | 0.0 | 7.28 | SRV | |
| | 3 | 1.079 | 92.636 | SRV | |
| | 1 | 0.0 | 7.435 | SRV | |
| | 2 | 1.08 | 5.757 | SRV | |
| | 3 | 1.08 | 86.808 | SRV | |
| | 1 | 0.0 | 7.369 | SRV | |
| | 2 | 1.08 | 16.474 | SRV | |
| | 3 | 1.08 | 76.157 | SRV | |
| | 1 | 0.0 | 7.407 | SRV | |
| | 2 | 1.08 | 88.202 | SRV | |
| | 3 | 1.08 | 4.391 | SRV | |
| | 1 | 0.0 | 7.064 | SRV | |
| | 2 | 0.0 | 0.401 | SRV | |
| | 3 | 1.081 | 92.536 | SRV | |
| | 1 | 0.0 | 7.442 | SRV | |
| | 2 | 0.0 | 0.0 | SRV | |
| | 3 | 1.08 | 92.558 | SRV | |
| | 1 | 0.0 | 7.437 | SRV | |
| | 2 | 1.08 | 79.111 | SRV | |
| | 3 | 1.08 | 13.452 | SRV | |

| | | | | | |
|--|-----------|----|--------|-------------------|--|
| | test | 2H | 0.0 | SRV+Double | |
| | reference | 2H | 0.0465 | SRV+Double | |
| | reference | 2H | 0.0373 | SRV+Double | |
| | test | 2H | 0.0 | SRV+Double | |
| | reference | 2H | 0.0376 | SRV+Double | |
| | reference | 2H | 0.0 | SRV+Double | |
| | test | 2H | 0.0 | SRV+Double | |
| | reference | 2H | 0.0715 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.4671 | SRV+Double+Triple | |
| | reference | 3H | 0.5049 | 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 | 0.4994 | SRV+Double+Triple | |
| | reference | 3H | 0.4529 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0438 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.4354 | SRV+Double+Triple | |
| | reference | 3H | 0.4971 | 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 | 0.4965 | SRV+Double+Triple | |
| | reference | 3H | 0.452 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0574 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.4524 | SRV+Double+Triple | |
| | reference | 3H | 0.5067 | 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 | 0.5018 | SRV+Double+Triple | |
| | reference | 3H | 0.4525 | SRV+Double+Triple | |
| | test | 2H | 0.0 | SRV+Double+Triple | |
| | test | 3H | 0.0 | SRV+Double+Triple | |
| | reference | 2H | 0.0505 | SRV+Double+Triple | |
| | reference | 2H | 0.0 | SRV+Double+Triple | |
| | reference | 3H | 0.4434 | SRV+Double+Triple | |
| | reference | 3H | 0.503 | 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 | 0.4967 | SRV+Double+Triple | |
| | reference | 3H | 0.4522 | SRV+Double+Triple | |