

RELAX Combined Report

SRV vs SRV+Double vs SRV+Double+Triple

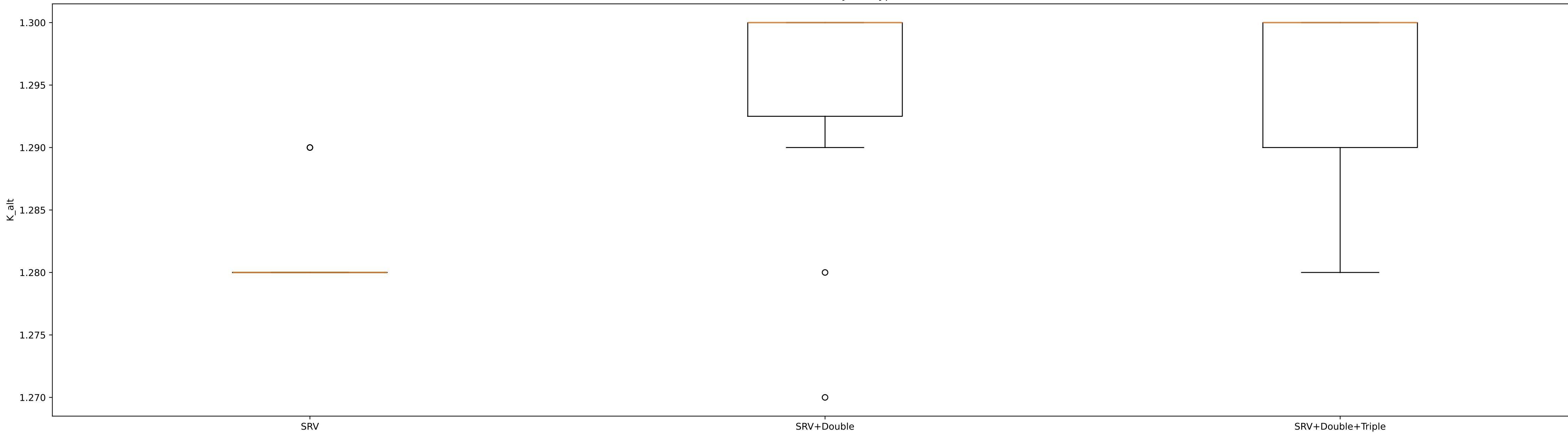
Includes:

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

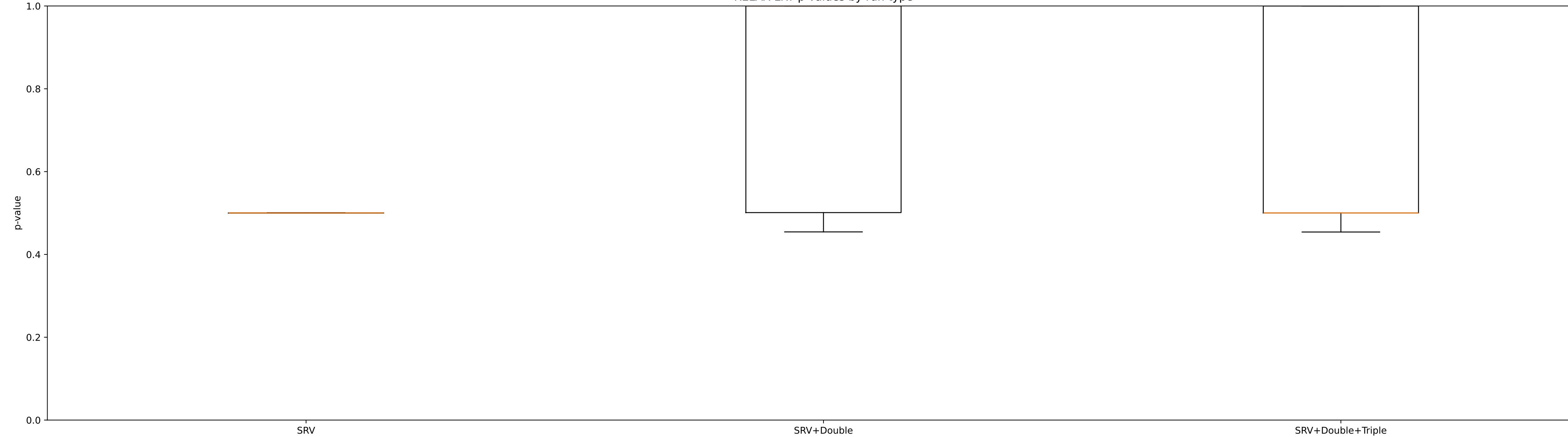
Run-type summary statistics

| p_median | p_min | p_max | K_median | K_min | K_max | omega_ref_medi an | omega_test_medi an | warnings_count | 2H_reference_m edian | 2H_test_median |
|----------|--------|--------|----------|-------|-------|----------------------|-----------------------|----------------|-------------------------|----------------|
| 0.5002 | 0.4999 | 0.5007 | 1.28 | 1.28 | 1.29 | 0.2466 | 0.1438 | 10 | nan | nan |
| 1.0 | 0.4544 | 1.0 | 1.3 | 1.27 | 1.3 | 0.2466 | 0.1438 | 10 | 0.0 | 0.0 |
| 0.5002 | 0.4541 | 1.0 | 1.3 | 1.28 | 1.3 | 0.2466 | 0.1438 | 10 | 0.0 | 0.0 |

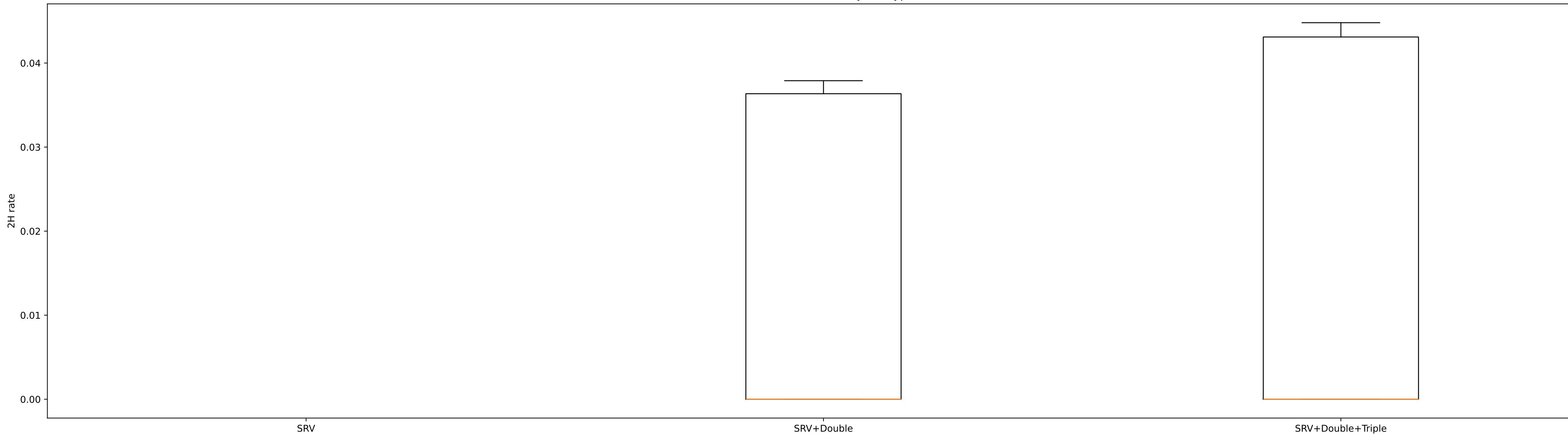
K (alternative) by run type



RELAX LRT p-values by run type



2H rates (reference) by run type



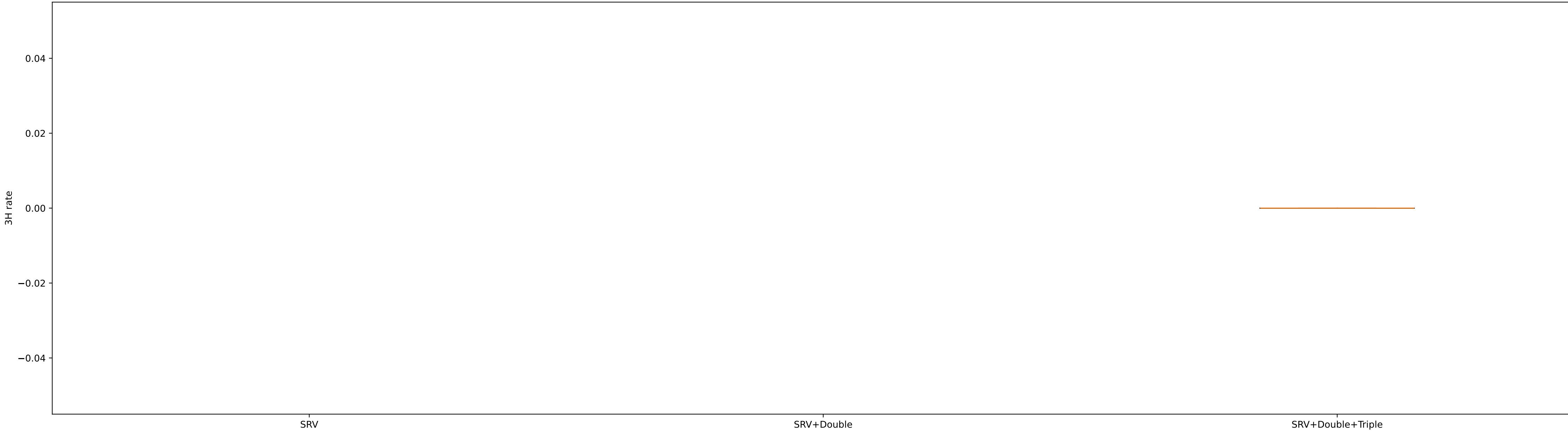
2H rates (test) by run type



3H rates (reference) by run type



3H rates (test) by run type



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

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test |
|--|------------------|----------------|--------------|------------------------------|-------------------------|
| | 1 | 0.4999 | 1.28 | 0.2474 | 0.1439 |
| | 2 | 0.4999 | 1.28 | 0.2466 | 0.1437 |
| | 3 | 0.4999 | 1.29 | 0.2476 | 0.1441 |
| | 4 | 0.5001 | 1.28 | 0.2472 | 0.1439 |
| | 5 | 0.5002 | 1.28 | 0.2462 | 0.1438 |
| | 6 | 0.5007 | 1.28 | 0.2466 | 0.1437 |
| | 7 | 0.5005 | 1.28 | 0.2466 | 0.1437 |
| | 8 | 0.5002 | 1.28 | 0.2466 | 0.1439 |
| | 9 | 0.5001 | 1.29 | 0.2464 | 0.1438 |
| | 10 | 0.5004 | 1.28 | 0.2474 | 0.1439 |

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

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test |
|--|------------------|----------------|--------------|------------------------------|-------------------------|
| | 1 | 1.0 | 1.3 | 0.2466 | 0.1437 |
| | 2 | 0.4544 | 1.3 | 0.2464 | 0.1438 |
| | 3 | 1.0 | 1.3 | 0.2465 | 0.1438 |
| | 4 | 1.0 | 1.3 | 0.2464 | 0.1439 |
| | 5 | 0.5007 | 1.28 | 0.2463 | 0.144 |
| | 6 | 0.502 | 1.27 | 0.2472 | 0.1439 |
| | 7 | 1.0 | 1.3 | 0.2464 | 0.1439 |
| | 8 | 1.0 | 1.3 | 0.2467 | 0.1438 |
| | 9 | 1.0 | 1.3 | 0.2476 | 0.1442 |
| | 10 | 0.5 | 1.29 | 0.2466 | 0.1438 |

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

| | replicate | p_value | K_alt | global_dNdS_reference | global_dNdS_test |
|--|------------------|----------------|--------------|------------------------------|-------------------------|
| | 1 | 1.0 | 1.3 | 0.2466 | 0.1437 |
| | 2 | 1.0 | 1.3 | 0.2464 | 0.1439 |
| | 3 | 0.5002 | 1.29 | 0.2469 | 0.1438 |
| | 4 | 0.5002 | 1.28 | 0.2464 | 0.1439 |
| | 5 | 0.5002 | 1.29 | 0.2466 | 0.1437 |
| | 6 | 0.5002 | 1.28 | 0.2469 | 0.1437 |
| | 7 | 1.0 | 1.3 | 0.2466 | 0.1438 |
| | 8 | 0.4551 | 1.3 | 0.246 | 0.1436 |
| | 9 | 0.4541 | 1.3 | 0.2469 | 0.1437 |
| | 10 | 1.0 | 1.3 | 0.2464 | 0.1439 |

| | | | | | |
|--|-----------|---|---------|--------|------------|
| | test | Negative selection | 0.134 | 62.647 | SRV+Double |
| | test | Negative selection | 0.156 | 37.353 | SRV+Double |
| | test | Negative selection | 0.213 | 62.647 | SRV+Double |
| | test | Negative selection, Diversifying selection | 0.239 | 37.353 | SRV+Double |
| | reference | Ω-class distributions (all) (cols 1-7/7) | | | 0.067 |
| | reference | Negative selection | 0.209 | 41.555 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.211 | 58.378 | SRV+Double |
| | test | Negative selection, Diversifying selection | 99.672 | 0.067 | SRV+Double |
| | test | Negative selection | 0.209 | 41.555 | SRV+Double |
| | test | Negative selection, Diversifying selection | 0.211 | 58.378 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 111.998 | 0.061 | SRV+Double |
| | reference | Negative selection | 0.206 | 15.282 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.221 | 84.657 | SRV+Double |
| | test | Negative selection, Diversifying selection | 421.25 | 0.061 | SRV+Double |
| | test | Negative selection, Diversifying selection | 111.998 | 0.061 | SRV+Double |
| | test | Negative selection | 0.132 | 15.282 | SRV+Double |
| | test | Negative selection | 0.145 | 84.657 | SRV+Double |
| | test | Negative selection | 0.206 | 15.282 | SRV+Double |
| | test | Negative selection, Diversifying selection | 0.221 | 84.657 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 99.945 | 0.067 | SRV+Double |
| | reference | Negative selection | 0.203 | 12.795 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.212 | 87.138 | SRV+Double |
| | test | Negative selection, Diversifying selection | 99.945 | 0.067 | SRV+Double |
| | test | Negative selection | 0.203 | 12.795 | SRV+Double |
| | test | Negative selection | 0.212 | 87.138 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 107.77 | 0.061 | SRV+Double |
| | reference | Negative selection | 0.212 | 63.46 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.225 | 36.479 | SRV+Double |
| | test | Negative selection, Diversifying selection | 387.525 | 0.061 | SRV+Double |
| | test | Negative selection, Diversifying selection | 107.77 | 0.061 | SRV+Double |
| | test | Negative selection | 0.139 | 63.46 | SRV+Double |
| | test | Negative selection | 0.15 | 36.479 | SRV+Double |
| | test | Negative selection | 0.212 | 63.46 | SRV+Double |
| | test | Negative selection, Diversifying selection | 0.225 | 36.479 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 101.315 | 0.067 | SRV+Double |
| | reference | Negative selection | 0.21 | 69.128 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.212 | 30.805 | SRV+Double |
| | test | Negative selection, Diversifying selection | 101.315 | 0.067 | SRV+Double |
| | test | Negative selection | 0.21 | 69.128 | SRV+Double |
| | test | Negative selection, Diversifying selection | 0.212 | 30.805 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 2.322 | 0.0 | SRV+Double |
| | reference | Negative selection | 0.208 | 31.255 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 0.229 | 68.745 | SRV+Double |
| | test | Negative selection, Diversifying selection | 2.98 | 0.0 | SRV+Double |
| | test | Negative selection, Diversifying selection | 2.322 | 0.0 | SRV+Double |
| | test | Negative selection | 0.131 | 31.255 | SRV+Double |
| | test | Negative selection | 0.148 | 68.745 | SRV+Double |
| | test | Negative selection | 0.208 | 31.255 | SRV+Double |
| | test | Negative selection, Diversifying selection | 12.0229 | 68.745 | SRV+Double |
| | reference | Negative selection, Diversifying selection | 99.077 | 0.067 | SRV+Double |

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

| | class_id | syn_rate | proportion_per cent | run_type | |
|-----|-----------------|-----------------|----------------------------|-----------------|--|
| SRV | 1 | 0.024 | 37.492 | SRV | |
| | 2 | 0.024 | 26.763 | SRV | |
| | 3 | 2.755 | 35.745 | SRV | |
| | 1 | 0.023 | 30.639 | SRV | |
| | 2 | 0.024 | 33.594 | SRV | |
| | 3 | 2.754 | 35.767 | SRV | |
| | 1 | 0.023 | 30.088 | SRV | |
| | 2 | 0.024 | 34.136 | SRV | |
| | 3 | 2.753 | 35.776 | SRV | |
| SRV | 1 | 0.024 | 28.869 | SRV | |
| | 2 | 0.024 | 35.377 | SRV | |
| | 3 | 2.754 | 35.754 | SRV | |
| | 1 | 0.024 | 31.374 | SRV | |
| | 2 | 0.024 | 32.921 | SRV | |
| | 3 | 2.757 | 35.705 | SRV | |
| | 1 | 0.024 | 37.09 | SRV | |
| | 2 | 0.024 | 27.174 | SRV | |
| | 3 | 2.755 | 35.735 | SRV | |
| SRV | 1 | 0.024 | 28.927 | SRV | |
| | 2 | 0.024 | 35.324 | SRV | |
| | 3 | 2.755 | 35.748 | SRV | |
| | 1 | 0.024 | 36.725 | SRV | |
| | 2 | 0.024 | 27.55 | SRV | |
| | 3 | 2.756 | 35.725 | SRV | |
| | 1 | 0.023 | 28.581 | SRV | |
| | 2 | 0.024 | 35.653 | SRV | |
| | 3 | 2.754 | 35.766 | SRV | |
| SRV | 1 | 0.024 | 27.966 | SRV | |
| | 2 | 0.024 | 36.313 | SRV | |
| | 3 | 2.756 | 35.721 | SRV | |

