**Table S1.** Expected (*H*E) and observed (*H*O) heterozygosity for 188 single nucleotide polymorphisms in populations of chum salmon in Prince William Sound, Alaska.

|  |  |  |  |
| --- | --- | --- | --- |
| Locus | *H*E | *H*O | Reference |
| *CTS1-627* | 0.260 | 0.245 | Elfstrom et al. (2007) |
| *Oke\_ACOT-100*3 | 0.500 | 0.510 | Petrou et al. (in revision) |
| *Oke\_AhR1-278*5 | 0.095 | 0.095 | Elfstrom et al. (2007) |
| *Oke\_AhR1-78* | 0.496 | 0.525 | Elfstrom et al. (2007) |
| *Oke\_APOB-60* | 0.461 | 0.450 | Petrou et al. (in revision) |
| *Oke\_ARF* | 0.421 | 0.423 | Smith et al. (2005a) |
| *Oke\_ATP5L-105*3 | 0.413 | 0.415 | Petrou et al. (in revision) |
| *Oke\_ATP5L-248* | 0.437 | 0.431 | Petrou et al. (in revision) |
| *Oke\_azin1-90* | 0.357 | 0.363 | Petrou et al. (in revision) |
| *Oke\_brd2-118* | 0.240 | 0.233 | Seeb et al. (2011) |
| *Oke\_brp16-65* | 0.432 | 0.433 | Petrou et al. (in revision) |
| *Oke\_CATB-60* | 0.060 | 0.060 | Petrou et al. (in revision) |
| *Oke\_ccd16-77* | 0.485 | 0.506 | Seeb et al. (2011) |
| *Oke\_CCT3-143*5 | 0.085 | 0.082 | Elfstrom et al. (2007) |
| *Oke\_CCT3-220* | 0.291 | 0.296 | Elfstrom et al. (2007) |
| *Oke\_CD123-62* | 0.452 | 0.454 | Petrou et al. (in revision) |
| *Oke\_CD81-108* | 0.032 | 0.031 | Petrou et al. (in revision) |
| *Oke\_CD81-173*3 | 0.450 | 0.469 | Petrou et al. (in revision) |
| *Oke\_cjo57-86* | 0.499 | 0.499 | Petrou et al. (in revision) |
| *Oke\_CKS1-70* | 0.293 | 0.290 | Petrou et al. (in revision) |
| *Oke\_CKS1-94* | 0.414 | 0.417 | Petrou et al. (in revision) |
| *Oke\_CKS-389* | 0.496 | 0.504 | Smith et al. (2005b) |
| *Oke\_CO1A1-72* | 0.377 | 0.389 | Petrou et al. (in revision) |
| *Oke\_CO1A1-76* | 0.053 | 0.054 | Petrou et al. (in revision) |
| *Oke\_col1a2-62*3 | 0.500 | 0.473 | Petrou et al. (in revision) |
| *Oke\_Cr301,2* | -- | -- | Smith et al. (2005b) |
| *Oke\_Cr3861,2* | -- | -- | Smith et al. (2005b) |
| *Oke\_ctgf-105* | 0.145 | 0.150 | Elfstrom et al. (2007) |
| *Oke\_CTR2-82* | 0.495 | 0.506 | Petrou et al. (in revision) |
| *Oke\_DBLOH-79* | 0.493 | 0.494 | Petrou et al. (in revision) |
| *Oke\_DCXR-87* | 0.195 | 0.200 | Petrou et al. (in revision) |
| *Oke\_DM20-548* | 0.498 | 0.500 | Smith et al. (2005b) |
| *Oke\_e2ig5-50* | 0.498 | 0.524 | Petrou et al. (in revision) |
| *Oke\_EF2-394* | 0.451 | 0.450 | Petrou et al. (in revision) |
| *Oke\_EIF4EB* | 0.314 | 0.309 | Smith et al. (2005a) |
| *Oke\_eif4g1-43* | 0.400 | 0.416 | Petrou et al. (in revision) |
| *Oke\_f5-71* | 0.389 | 0.381 | Petrou et al. (in revision) |
| *Oke\_FANK1-166* | 0.489 | 0.510 | Petrou et al. (in revision) |
| *Oke\_FANK1-96*5 | 0.226 | 0.218 | Petrou et al. (in revision) |
| *Oke\_FBXL5-61* | 0.194 | 0.194 | Petrou et al. (in revision) |
| *Oke\_gdh1-191*5 | 0.357 | 0.364 | Petrou et al. (in revision) |
| *Oke\_gdh1-234*3 | 0.311 | 0.313 | Petrou et al. (in revision) |
| *Oke\_gdh1-62* | 0.499 | 0.504 | Petrou et al. (in revision) |
| *Oke\_GHII-3129* | 0.070 | 0.069 | Elfstrom et al. (2007) |
| *Oke\_glrx1-78* | 0.384 | 0.389 | Petrou et al. (in revision) |
| *Oke\_GNMT-100* | 0.497 | 0.515 | Petrou et al. (in revision) |
| *Oke\_GnRH-373* | 0.457 | 0.448 | Smith et al. (2005b) |
| *Oke\_GPDH*5 | 0.254 | 0.256 | Smith et al. (2005a) |
| *Oke\_GPH-105*3 | 0.467 | 0.468 | Elfstrom et al. (2007) |
| *Oke\_GPH-78* | 0.161 | 0.162 | Elfstrom et al. (2007) |
| *Oke\_H2AX-72*3 | 0.309 | 0.309 | Petrou et al. (in revision) |
| *Oke\_hmgb1-66* | 0.467 | 0.449 | Petrou et al. (in revision) |
| *Oke\_hnRNPL-239* | 0.029 | 0.025 | Elfstrom et al. (2007) |
| *Oke\_HP-182* | 0.397 | 0.404 | Elfstrom et al. (2007) |
| *Oke\_HSP90BA-299* | 0.051 | 0.050 | Elfstrom et al. (2007) |
| *Oke\_IGFI.1* | 0.026 | 0.025 | Smith et al. (2005a) |
| *Oke\_IL-1RA* | 0.180 | 0.180 | Smith et al. (2005a) |
| *Oke\_IL8r2-406* | 0.335 | 0.332 | Petrou et al. (in revision) |
| *Oke\_IL8r-272*5 | 0.176 | 0.175 | Smith et al. (2005b) |
| *Oke\_KPNA2-87* | 0.079 | 0.078 | Elfstrom et al. (2007) |
| *Oke\_lactb2-71* | 0.492 | 0.461 | Petrou et al. (in revision) |
| *Oke\_lamp2-138*5 | 0.102 | 0.105 | Petrou et al. (in revision) |
| *Oke\_LAMP2-186* | 0.468 | 0.472 | Petrou et al. (in revision) |
| *Oke\_mcfd2-86*3 | 0.470 | 0.491 | Petrou et al. (in revision) |
| *Oke\_METK2-97* | 0.388 | 0.402 | Petrou et al. (in revision) |
| *Oke\_mgll-49* | 0.500 | 0.525 | Petrou et al. (in revision) |
| *Oke\_MLRN-63* | 0.444 | 0.447 | Petrou et al. (in revision) |
| *Oke\_MOESIN*3 | 0.234 | 0.223 | Smith et al. (2005a) |
| *Oke\_nc2b-148*3 | 0.476 | 0.478 | Petrou et al. (in revision) |
| *Oke\_ND3-69*1,2 | -- | -- | Smith et al. (2005b) |
| *Oke\_ndub3-58* | 0.072 | 0.055 | Petrou et al. (in revision) |
| *Oke\_NHERF-123*3 | 0.343 | 0.308 | Petrou et al. (in revision) |
| *Oke\_NHERF-54* | 0.312 | 0.297 | Petrou et al. (in revision) |
| *Oke\_NUPR1-70* | 0.329 | 0.327 | Petrou et al. (in revision) |
| *Oke\_PDIA3-475*3 | 0.385 | 0.397 | Petrou et al. (in revision) |
| *Oke\_PDIA3-82* | 0.439 | 0.442 | Petrou et al. (in revision) |
| *Oke\_pgap-111* | 0.438 | 0.444 | Petrou et al. (in revision) |
| *Oke\_pgap-92*5 | 0.371 | 0.381 | Petrou et al. (in revision) |
| *Oke\_pnrc2-78* | 0.354 | 0.339 | Petrou et al. (in revision) |
| *Oke\_psmd9-188* | 0.451 | 0.460 | Petrou et al. (in revision) |
| *Oke\_psmd9-57*5 | 0.159 | 0.157 | Petrou et al. (in revision) |
| *Oke\_rab5a-117* | 0.453 | 0.454 | Petrou et al. (in revision) |
| *Oke\_ras1-362*3 | 0.486 | 0.500 | Elfstrom et al. (2007) |
| *Oke\_RFC2* | 0.039 | 0.036 | Smith et al. (2005a) |
| *Oke\_RH1OP* | 0.473 | 0.492 | Smith et al. (2005a) |
| *Oke\_ROA1-209* | 0.393 | 0.375 | Petrou et al. (in revision) |
| *Oke\_RPN1-80*3 | 0.496 | 0.543 | Petrou et al. (in revision) |
| *Oke\_RS27-81* | 0.315 | 0.319 | Petrou et al. (in revision) |
| *Oke\_RS27-94*3 | 0.283 | 0.197 | Petrou et al. (in revision) |
| *Oke\_RS9-379*3 | 0.497 | 0.464 | Petrou et al. (in revision) |
| *Oke\_RSPRY1-106* | 0.107 | 0.104 | Seeb et al. (2011) |
| *Oke\_serpin* | 0.494 | 0.496 | Smith et al. (2005a) |
| *Oke\_slc1a3a-86* | 0.482 | 0.469 | Petrou et al. (in revision) |
| *Oke\_sylc-90* | 0.371 | 0.363 | Petrou et al. (in revision) |
| *Oke\_TCP1-78* | 0.163 | 0.158 | Elfstrom et al. (2007) |
| *Oke\_TCTA-202* | 0.490 | 0.494 | Petrou et al. (in revision) |
| *Oke\_TCTA-99*5 | 0.435 | 0.461 | Petrou et al. (in revision) |
| *Oke\_Tf-278* | 0.500 | 0.482 | Elfstrom et al. (2007) |
| *Oke\_thic-84* | 0.492 | 0.474 | Petrou et al. (in revision) |
| *Oke\_txnrd1-74* | 0.360 | 0.349 | Petrou et al. (in revision) |
| *Oke\_u0602-244*3 | 0.493 | 0.501 | Seeb et al. (2011) |
| *Oke\_U1001-79*5 | 0.495 | 0.514 | Seeb et al. (2011) |
| *Oke\_U1002-165*5 | 0.410 | 0.401 | Seeb et al. (2011) |
| *Oke\_U1002-262* | 0.496 | 0.478 | Seeb et al. (2011) |
| *Oke\_U1008-83* | 0.173 | 0.169 | Seeb et al. (2011) |
| *Oke\_U1010-154*2 | 0.000 | 0.000 | Seeb et al. (2011) |
| *Oke\_U1010-251*3 | 0.486 | 0.485 | Seeb et al. (2011) |
| *Oke\_U1012-241* | 0.500 | 0.510 | Seeb et al. (2011) |
| *Oke\_U1012-60*5 | 0.500 | 0.501 | Seeb et al. (2011) |
| *Oke\_U1015-255* | 0.496 | 0.472 | Seeb et al. (2011) |
| *Oke\_U1016-154*4 | 0.493 | 0.545 | Seeb et al. (2011) |
| *Oke\_U1017-52* | 0.310 | 0.299 | Seeb et al. (2011) |
| *Oke\_U1018-50* | 0.009 | 0.009 | Seeb et al. (2011) |
| *Oke\_U1019-218* | 0.006 | 0.006 | Seeb et al. (2011) |
| *Oke\_U1020-75*3 | 0.341 | 0.370 | Seeb et al. (2011) |
| *Oke\_U1021-102* | 0.350 | 0.343 | Seeb et al. (2011) |
| *Oke\_U1022-114*5 | 0.263 | 0.255 | Seeb et al. (2011) |
| *Oke\_U1022-139*5 | 0.312 | 0.311 | Seeb et al. (2011) |
| *Oke\_U1023-147* | 0.486 | 0.524 | Seeb et al. (2011) |
| *Oke\_U1024-113* | 0.030 | 0.029 | Seeb et al. (2011) |
| *Oke\_U1025-135* | 0.033 | 0.032 | Seeb et al. (2011) |
| *Oke\_U1027-89*3 | 0.394 | 0.345 | Seeb et al. (2011) |
| *Oke\_U1028-100*3 | 0.422 | 0.435 | Seeb et al. (2011) |
| *Oke\_U1031-132* | 0.154 | 0.151 | Seeb et al. (2011) |
| *Oke\_U1103-150*3 | 0.424 | 0.370 | Petrou et al. (in revision) |
| *Oke\_u1-519* | 0.482 | 0.494 | Smith et al. (2005b) |
| *Oke\_U2001-629*3 | 0.485 | 0.473 | Petrou et al. (in revision) |
| *Oke\_U2002-200* | 0.493 | 0.494 | Petrou et al. (in revision) |
| *Oke\_U2003-142* | 0.027 | 0.027 | Petrou et al. (in revision) |
| *Oke\_U2005-62* | 0.411 | 0.405 | Petrou et al. (in revision) |
| *Oke\_U2006-109* | 0.484 | 0.492 | Petrou et al. (in revision) |
| *Oke\_U2007-190* | 0.466 | 0.450 | Petrou et al. (in revision) |
| *Oke\_U2010-94* | 0.496 | 0.497 | Petrou et al. (in revision) |
| *Oke\_U2011-107* | 0.077 | 0.077 | Petrou et al. (in revision) |
| *Oke\_U2015-151* | 0.119 | 0.121 | Petrou et al. (in revision) |
| *Oke\_U2016-118* | 0.369 | 0.371 | Petrou et al. (in revision) |
| *Oke\_U2017-87* | 0.083 | 0.087 | Petrou et al. (in revision) |
| *Oke\_U2019-112* | 0.336 | 0.336 | Petrou et al. (in revision) |
| *Oke\_U2022* | 0.001 | 0.001 | Smith et al. (2005a) |
| *Oke\_U2020-51* | 0.410 | 0.395 | Petrou et al. (in revision) |
| *Oke\_U2021-86* | 0.499 | 0.492 | Petrou et al. (in revision) |
| *Oke\_U2022-101* | 0.120 | 0.115 | Petrou et al. (in revision) |
| *Oke\_U2023-99* | 0.057 | 0.058 | Petrou et al. (in revision) |
| *Oke\_U2024-93*3 | 0.424 | 0.425 | Petrou et al. (in revision) |
| *Oke\_U2025-86* | 0.499 | 0.443 | Petrou et al. (in revision) |
| *Oke\_U2026-64* | 0.474 | 0.465 | Petrou et al. (in revision) |
| *Oke\_U2029-79* | 0.500 | 0.506 | Petrou et al. (in revision) |
| *Oke\_U2031-37* | 0.105 | 0.104 | Petrou et al. (in revision) |
| *Oke\_U2032-74*3 | 0.230 | 0.224 | Petrou et al. (in revision) |
| *Oke\_U2033-122* | 0.333 | 0.338 | Petrou et al. (in revision) |
| *Oke\_U2034-55* | 0.460 | 0.452 | Petrou et al. (in revision) |
| *Oke\_U2035-54* | 0.102 | 0.103 | Petrou et al. (in revision) |
| *Oke\_U2037-76* | 0.156 | 0.159 | Petrou et al. (in revision) |
| *Oke\_U2038-32* | 0.099 | 0.098 | Petrou et al. (in revision) |
| *Oke\_U2040-77* | 0.478 | 0.450 | Petrou et al. (in revision) |
| *Oke\_U2041-84* | 0.499 | 0.484 | Petrou et al. (in revision) |
| *Oke\_U2042-61* | 0.295 | 0.294 | Petrou et al. (in revision) |
| *Oke\_U2043-51* | 0.160 | 0.164 | Petrou et al. (in revision) |
| *Oke\_U2045-43* | 0.409 | 0.414 | Petrou et al. (in revision) |
| *Oke\_U2047-49* | 0.287 | 0.282 | Petrou et al. (in revision) |
| *Oke\_U2048-91* | 0.343 | 0.353 | Petrou et al. (in revision) |
| *Oke\_U2049-99* | 0.446 | 0.460 | Petrou et al. (in revision) |
| *Oke\_U2050-101* | 0.178 | 0.180 | Petrou et al. (in revision) |
| *Oke\_U2052-56* | 0.320 | 0.325 | Petrou et al. (in revision) |
| *Oke\_U2053-60*3 | 0.433 | 0.414 | Petrou et al. (in revision) |
| *Oke\_U2054-58* | 0.125 | 0.124 | Petrou et al. (in revision) |
| *Oke\_U2056-90*3 | 0.500 | 0.506 | Petrou et al. (in revision) |
| *Oke\_U2057-80* | 0.480 | 0.482 | Petrou et al. (in revision) |
| *Oke\_U212* | 0.101 | 0.098 | Smith et al. (2005a) |
| *Oke\_U216*3 | 0.136 | 0.129 | Smith et al. (2005a) |
| *Oke\_U217* | 0.397 | 0.392 | Smith et al. (2005a) |
| *Oke\_U22* | 0.492 | 0.473 | Smith et al. (2005a) |
| *Oke\_U302-195* | 0.042 | 0.035 | Elfstrom et al. (2007) |
| *Oke\_U502-241* | 0.282 | 0.281 | Elfstrom et al. (2007) |
| *Oke\_U503-272* | 0.033 | 0.033 | Elfstrom et al. (2007) |
| *Oke\_U504-228*3 | 0.284 | 0.300 | Elfstrom et al. (2007) |
| *Oke\_U505-112*3 | 0.450 | 0.465 | Elfstrom et al. (2007) |
| *Oke\_U506-110* | 0.492 | 0.510 | Elfstrom et al. (2007) |
| *Oke\_U507-286* | 0.499 | 0.515 | Elfstrom et al. (2007) |
| *Oke\_U507-87*5 | 0.419 | 0.411 | Elfstrom et al. (2007) |
| *Oke\_U509-219* | 0.452 | 0.475 | Elfstrom et al. (2007) |
| *Oke\_U510-204* | 0.374 | 0.369 | Elfstrom et al. (2007) |
| *Oke\_U511-271* | 0.095 | 0.094 | Elfstrom et al. (2007) |
| *Oke\_U514-150* | 0.052 | 0.050 | Elfstrom et al. (2007) |
| *Oke\_UBA3-245*3 | 0.489 | 0.507 | Seeb et al. (2011) |
| *Oke\_uqcrfs-69* | 0.010 | 0.010 | Petrou et al. (in revision) |
| *Oke\_XBP1-82* | 0.412 | 0.410 | Petrou et al. (in revision) |
| *Oke\_zn593-152* | 0.384 | 0.393 | Petrou et al. (in revision) |
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1 SNPs from mtDNA loci.

2SNPs were dropped because they were monomorphic.

3 SNPs were eliminated because of poor success rate of amplification on historical scale collections.

4 SNPs were eliminated due to failing Hardy-Weinberg expectations.

5 SNPs dropped due to linkage.

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