

**Table S3: Potentially damaging SNPs found in regions with strong evidence of non-neutral evolution.**

| Chr | Position  | rsID       | AA            | SIFT       | Gene           | ENSEMBL         | CEU   | YRI  |
|-----|-----------|------------|---------------|------------|----------------|-----------------|-------|------|
| 1   | 11090916  | rs12711521 | D371Y         | $p = 0.04$ | MASP2          | ENST00000400897 | 0.86  | 0.1  |
| 1   | 248084909 | rs34508376 | M197R         | $p=0.01$   | OR2T8          | ENST00000319968 | 0.64  | 0.05 |
| 1   | 248113026 | rs10888281 | Y289*         | —          | OR2L8          | ENST00000357191 | 0.94  | 0.25 |
| 1   | 248129240 | rs4478844  | V203M         | $p=0.00$   | OR2AK2         | ENST00000366480 | 0.67  | 0.05 |
| 2   | 27424636  | rs1395     | S481F         | $p=0.05$   | SLC5A6         | ENST00000310574 | 0.74  | 0.16 |
| 5   | 138720108 | rs11242462 | W45*          | —          | SLC23A1        | ENST00000508270 | 0.29  | 0.80 |
| 5   | 177378959 | rs7720935  | <i>splice</i> | —          | RP11-423H2.3.1 | ENST00000507072 | 0.94  | 0.40 |
| 8   | 16043667  | rs435815   | <i>splice</i> | —          | MSR1           | ENST00000445506 | 0.11  | 0.54 |
| 19  | 44932972  | rs1434579  | G662R         | $p=0.04$   | ZNF229         | ENST00000291187 | 0.40  | 0.04 |
| 20  | 2291722   | rs6048066  | I163L         | $p=0.01$   | TGM3           | ENST00000420960 | 0.006 | 0.49 |

SNPs found in the top 0.2% of XP-SFselect regions, deemed damaging by SIFT (nonsynonymous, with  $p$ -value  $\leq 0.05$ ) or SnpEff (nonsense or splice-site variant). Frequencies in CEU and YRI populations also shown. Splice site donor mutations are indicated by *splice* in the AA column.