| **Polymorphism** | **NCBI dbSNP**  **ID** | **Type 2 diabetes**  **N=1261**  **% (n)** | **Controls**  **N=1105**  **% (n)** |  |
| --- | --- | --- | --- | --- |
| **MT-RNR1** |  |  |  |  |
| m.650T>C | rs386828875 | 0.15(2) | 0.18(2) |  |
| m.663A>G | rs56489998 | 0.79(10) | 0.27(3) |  |
| m.667T>C | rs55723650 | 0(0) | 0(0) |  |
| m.669T>C | rs879005843 | 0.15 (2) | 0.27(3) |  |
| m.678T>C | rs1556422476 | 0 (0) | 0(0) |  |
| m.680T>C | rs1569483792 | 0 (0) | 0(0) |  |
| m.703A>C | rs28376380 | 0 (0) | 0(0) |  |
| m.709G>A,C | rs2853517 | 13.87(175) | 15.47(171) |  |
| m.710T>C | rs28358568 | 0 (0) | 0(0) |  |
| m.711T>C | rs878890102 | 0 (0) | 0(0) |  |
| m.714A>G | rs1556422478 | 0 (0) | 0.09(1) |  |
| m.721T>C | rs1556422479 | 0.079(1) | 0.18(2) |  |
| m.722C>T | rs879214991 | 0 (0) | 0.18(2) |  |
| m.723A>C,G | rs386828878 | 0.55(7) | 0.36(4) |  |
| m.724C>T | rs8791311440 | 0 (0) | 0(0) |  |
| m.731A>G | rs1569483794 | 0 (0) | 0(0) |  |
| m.739C>T | rs879071964 | 0.15(2) | 0.09(1) |  |
| m.740G>A | rs1556422480 | 0 (0) | 0(0) |  |
| m.742T>C | rs368221863 | 0 (0) | 0(0) |  |
| m.745A>G | rs1556422481 | 0 (0) | 0.09(1) |  |
| m.747A>G | rs1556422483 | 0 (0) | 0(0) |  |
| m.748G>A | rs878857824 | 0 (0) | 0(0) |  |
| m.750A>G | rs2853518 | 96.03(1211) | 96.10(1062) |  |
| m.752C>T | rs201831870 | 0.23(3) | 0.18(2) |  |
| m.757A>C | rs285213340 | 0(0) | 0(0) |  |
| m.764A>G | rs1556422485 | 0(0) | 0(0) |  |
| m.769G>A | rs2853519 | 0(0) | 0(0) |  |
| m.789T>C | rs8792115400 | 0.15(2) | 0.18(2) |  |
| m.793C>T | rs878872556 | 0(0) | 0(0) |  |
| m.794T>C | rs1569483796 | 0(0) | 0(0) |  |
| m.806 | - | 0(0) | 0(0) |  |
| m.813A>G | rs878985110 | 0(0) | 0(0) |  |
| m.822G>A | rs1556422486 | 0(0) | 0(0) |  |
| m.825T>A,C | rs28535200 | 0(0) | 0(0) |  |
| m.827A>G | rs28358569 | 0.47(6) | 0.63(7) |  |
| m.850T>C | rs878918675 | 0(0) | 0(0) |  |
| m.851A>G | rs28502491 | 0(0) | 0(0) |  |
| m.869C>T | rs386828880 | 0.07(1) | 0(0) |  |
| m.870C>T | rs1556422489 | 0.07(1) | 0(0) |  |
| m.896A>G | rs15564224910 | 0.23(3) | 0.36(4) |  |
| m.915C>A | rs28408820 | 0(0) | 0(0) |  |
| m.921T>C | rs28358570 | 0(0) | 0(0) |  |
| m.927G>A | rs28377377 | 0(0) | 0(0) |  |
| m.930G>A | rs413529440 | 3.25(41) | 3.61(40) |  |
| m.942A>G | rs285792220 | 0.07(1) | 0(0) |  |
| m.951G>A | rs200887992 | 1.82(23) | 1.26(14) |  |
| m.953T>C | rs15564224950 | 0(0) | 0(0) |  |
| m.954C>T | rs15564224960 | 0(0) | 0(0) |  |
| m.955A>C | rs15564224970 | 0(0) | 0(0) |  |
| m.956C>T,A | rs3975157290 | 0(0) | 0(0) |  |
| m.956C>CC,CCC,CCCC | rs1110331850delins | 0(0) | 0(0) |  |
| m.961CTC>C | rs1556422498 | 0(0) | 0(0) |  |
| m.961T>CC,CCC | rs15564224990delins0 | 0(0) | 0(0) |  |
| m.961T>G,C | rs38885110 | 1.34(17) | 2.17(24) |  |
| m.962C>T | rs15564225000 | 0(0) | 0(0) |  |
| m.979C>T | rs8766575070 | 0(0) | 0(0) |  |
| m.980T>C,A | rs3975157310 | 0.07(1) | 0.27(3) |  |
| m.988G>A | rs879190662 | 0.15(2) | 0.09(1) |  |
| m.990T>C | rs727503165 | 0.07(1) | 0.18(2) |  |
| m.1005T>C | rs111033179 | 0(0) | 0.18(2) |  |
| m.1007G>A | rs111033213 | 0(0) | 0(0) |  |
| m.1008A>G,T | rs7275045050 | 0(0) | 0(0) |  |
| m.1018G>A,T | rs2856982 | 0.07(1) | 0(0) |  |
| m.1027A>G | rs7275045550 | 0(0) | 0(0) |  |
| m.1040T>C | rs727503163 | 0(0) | 0(0) |  |
| m.1041A>G | rs583275460 | 0.15(2) | 0(0) |  |
| m.1047A>G | rs15564225060 | 0(0) | 0(0) |  |
| m.1048C>T | rs2000974 | 0.31(4) | 0.54(6) |  |
| m.1050C>T | rs879019808 | 0(0) | 0(0) |  |
| m.1053A>G | rs1556422507 | 0(0) | 0(0) |  |
| m.1082A>G | rs15564225080 | 0(0) | 0(0) |  |
| m.1095T>C | rs2676066180 | 0(0) | 0(0) |  |
| m.1107T>C | rs1110333230 | 0.55(7) | 0.81(9) |  |
| m.1116A>G | rs1110332080 | 0(0) | 0(0) |  |
| m.1119T>C | rs397515724 | 0.23(3) | 0.45(5) |  |
| m.1120C>T | rs7275051710 | 0(0) | 0.09(1) |  |
| m.1168A>G | rs284775610 | 0(0) | 0(0) |  |
| m.1183T>C | rs1556422511 | 0(0) | 0(0) |  |
| m.1187T>C | rs111033320 | 0(0) | 0(0) |  |
| m.1189T>C | rs28358571 | 4.12(52) | 6.15(68) |  |
| m.1193T>C | rs1110333210 | 0.07(1) | 0(0) |  |
| m.1194C>A | rs284955040 | 0(0) | 0(0) |  |
| m.1209C>G | rs286272200 | 0(0) | 0(0) |  |
| m.1211G>A | rs3975157250 | 0(0) | 0(0) |  |
| m.1217G>A | rs286733260 | 0(0) | 0(0) |  |
| m.1243T>C | rs283585720 | 1.11(14) | 1.62(18) |  |
| m.1273G>T | rs284964700 | 0(0) | 0(0) |  |
| m.1275A>G,T | rs15564225150 | 0(0) | 0(0) |  |
| m.1282G>A | rs1569483805 | 0(0) | 0(0) |  |
| m.1284T>C | rs15564225160 | 0.31(4) | 0.36(4) |  |
| m.1290C>T | rs15564225170 | 0(0) | 0.09(1) |  |
| m.1291T>C | rs267606620 | 0(0) | 0(0) |  |
| m.1299A>G | rs15564225180 | 0.07(1) | 0.09(1) |  |
| m.1303G>A | rs8790367750 | 0.07(1) | 0.36(4) |  |
| m.1310C>T | rs111033354 | 0.15(2) | 0.09(1) |  |
| m.1315G>A | rs386828883 | 0(0) | 0(0) |  |
| m.1327G>A | rs28394599 | 0(0) | 0(0) |  |
| m.1341C>T | rs15564225190 | 0(0) | 0(0) |  |
| m.1398T>C | rs1556422526 | 0(0) | 0(0) |  |
| m.1406T>C | rs111033322 | 0.39(5) | 0.45(5) |  |
| m.1410G>A | rs28392533 | 0(0) | 0(0) |  |
| m.1413T>C | rs201251530 | 0(0) | 0(0) |  |
| m.1415G>A | rs876657505 | 0(0) | 0.09(1) |  |
| m.1418G>A | rs28366503 | 0(0) | 0(0) |  |
| m.1420T>C | rs111033356 | 0(0) | 0(0) |  |
| m.1438A>G | rs2001030 | 90.56(1142) | 96.92(1071) |  |
| m.1440G>A | rs1556422529 | 0(0) | 0(0) |  |
| m.1442G>A | rs28358573 | 0.15(2) | 0.09(1) |  |
| m.1450C>G | rs286953050 | 0(0) | 0(0) |  |
| m.1452T>C | rs1556422531 | 0(0) | 0.27(3) |  |
| m.1454G>A | rs28513139 | 0(0) | 0(0) |  |
| m.1461A>G | rs15564225340 | 0.07(1) | 0(0) |  |
| m.1462G>A | rs111033326 | 0.47(6) | 0.45(5) |  |
| m.1473C>T | rs15564225380 | 0(0) | 0(0) |  |
| m.1489G>A | rs28653347 | 0(0) | 0(0) |  |
| m.1494C>T | rs267606619 | 0(0) | 0(0) |  |
| m.1497C>T | rs28503725 | 0(0) | 0(0) |  |
| m.1498C>T | rs286856980 | 0(0) | 0(0) |  |
| m.1503G>A | rs7275031640 | 0.07(1) | 0.18(2) |  |
| m.1508C>T | rs386828884 | 0(0) | 0.09(1) |  |
| m.1530A>G | rs15564225400 | 0(0) | 0(0) |  |
| m.1536A>G | rs8766575060 | 0.15(2) | 0.09(1) |  |
| m.1541T>C | rs372042903 | 0(0) | 0.09(1) |  |
| m.1549G>A | rs28504042 | 0(0) | 0(0) |  |
| m.1553A>G | rs8791861120 | 0(0) | 0(0) |  |
| m.1555A>G | rs267606617 | 0.15(2) | 0.45(5) |  |
| m.1575T>C | rs1556422544 | 0(0) | 0(0) |  |
| m.1597C>T | rs1556422547 | 0(0) | 0(0) |  |
| m.1598G>A | rs3135027 | 0.31(4) | 0.18(2) |  |
| **MOTS-c** |  |  |  |  |
| m.1346A>G | rs879104061 | 0(0) | 0(0) |  |
| m.1351G>A | rs1556422520 | 0(0) | 0(0) |  |
| m.1374A>T | rs28673100 | 0(0) | 0(0) |  |
| m.1375 C>T | rs727504803 | 0(0) | 0(0) |  |
| m.1378C>T | rs28612532 | 0(0) | 0(0) |  |
| m.1379A>C | rs28729254 | 0(0) | 0(0) |  |
| m.1380G>A | rs28573951 | 0(0) | 0(0) |  |
| m.1382A>C | rs111033358 | 0.71(9) | 0(0) |  |
| m.1384A>C | rs1556422523 | 0(0) | 0(0) |  |
| m.1385C>T | rs111033442 | 0(0) | 0(0) |  |
| m.1389G>T | rs28493131 | 0(0) | 0(0) |  |
| m.1391T>C | rs111033357 | 0.07(1) | 0.18(2) |  |
| m.1393G>A | rs111033325 | 0.23(3) | 0.09(1) |  |
| **HUMANIN** |  |  |  |  |
| m.2638T>C | rs1556422640 | 0.07(1) | 0.18(2) |  |
| m.2658T>C | rs15564226420 | 0(0) | 0(0) |  |
| m.2667T>C | rs8788706260 | 0(0) | 0(0) |  |
| m.2690G>A | rs28602676 | 0(0) | 0(0) |  |
| m.2702G>A | rs879133847 | 0.15(2) | 0.27(3) |  |
| m.2706A>G0 | rs28541280 | 55.51(700) | 58.64(648) |  |
| m.2707A>G | rs8790085120 | 0.23(3) | 0(0) |  |
| **SHLP1** |  |  |  |  |
| m.2485T>C | rs879073925 | 0(0) | 0(0) |  |
| m.2503AAAAA>AAAAAA | rs879107139 | 0(0) | 0(0) |  |
| m.2516C>A | rs28489580 | 0(0) | 0(0) |  |
| m.2544C>T | rs28760274 | 0(0) | 0(0) |  |
| m.2558A>G | rs1556422636 | 0(0) | 0.18(2) |  |
| **SHLP2** |  |  |  |  |
| m.2092C>T | rs28588170 | 0(0) | 0(0) |  |
| m.2098G>A | rs1556422597 | 0.15(2) | 0.18(2) |  |
| m.2120G>A | rs878958423 | 0.07(1) | 0.09(1) |  |
| m.2140G>A | rs879196602 | 0.07(1) | 0(0) |  |
| m.2141T>C | rs1556422598 | 0.39(5) | 0.36(4) |  |
| m.2146A>T | rs1556422599 | 0(0) | 0(0) |  |
| m.2157T>C | rs1556422600 | 0(0) | 0.09(1) |  |
| m.2158T>C | rs41349444 | 0.79(10) | 0.99(11) |  |
| m.2159T>C | rs1556422604 | 0(0) | 0(0) |  |
| m.2163A>G | rs1569483830 | 0(0) | 0(0) |  |
| **SHLP-3** |  |  |  |  |
| m.1703C>A/T | rs28527344 | 0.07(1) | 0(0) |  |
| m.1706C>T | rs202116303 | 0(0) | 0(0) |  |
| m.1709G>A | rs200251800 | 0(0) | 0(0) |  |
| m.1710A>C | rs1569483815 | 0(0) | 0(0) |  |
| m.1715C>T | rs28658366 | 0.07(1) | 0(0) |  |
| m.1716C>T | rs1556422559 | 0(0) | 0.09(1) |  |
| m.1717T>C | rs879199899 | 0(0) | 0(0) |  |
| m.1719G>A | rs3928305 | 4.59(58) | 4.70(52) |  |
| m.1721C>T | rs200626438 | 1.18(15) | 1.35(15) |  |
| m.1733C>T | rs878868960 | 0(0) | 0(0) |  |
| m.1734C>T | rs879705291 | 0.07(1) | 0.09(1) |  |
| m.1736A>G | rs193303006 | 0.79(10) | 0.27(3) |  |
| m.1738T>C | rs28358574 | 0(0) | 0(0) |  |
| m.1739A>C | rs28729254 | 0(0) | 0(0) |  |
| m.1749C>T | rs28548620 | 0(0) | 0(0) |  |
| m.1750G>A | rs28491689 | 0(0) | 0(0) |  |
| m.1762A>G | rs1556422567 | 0(0) | 0(0) |  |
| m.1766T>C | rs1556422568 | 0.07(1) | 0.27(3) |  |
| m.1780T>C | rs2854127 | 0.07 (1) | 0(0) |  |
| m.1784A>C | rs28664718 | 0 (0) | 0(0) |  |
| m.1806T>C | rs1556422569 | 0.07 (1) | 0(0) |  |
| m.1809T>C | rs879152207 | 0.15(2) | 0.09(1) |  |
| m.1811A>G | rs28358576 | 9.59(121) | 13.66(151) |  |
| **SHLP4** |  |  |  |  |
| m.2442T>C | rs878892298 | 0.55(7) | 0(0) |  |
| m.2456T>A | rs28648999 | 0 (0) | 0(0) |  |
| m.2464G>A | rs28405829 | 0 (0) | 0(0) |  |
| m.2470G>A | rs28534550 | 0(0) | 0(0) |  |
| m.2483T>C | rs28534550 | 0.07(1) | 0.09(1) |  |
| m.2485T>C | rs879073925 | 0(0) | 0(0) |  |
| m.2503-25070(A)5>(A)60[insA] | rs879107139 | 0 (0) | 0(0) |  |
| m.2516C>A | rs28489580 | 0(0) | 0(0) |  |
| **SHLP5** |  |  |  |  |
| m.2780C>T | rs386828894 | 0.15(2) | 0(0) |  |
| m.2788C>T | rs386828895 | 0 (0) | 0(0) |  |
| m.2789C>T | rs28358581 | 0.07(1) | 0.09(1) |  |
| m.2792A>G | rs878940620 | 0 (0) | 0(0) |  |
| m.2794C>T | rs28692794 | 0 (0) | 0(0) |  |
| m.2800T>A | rs1556422656 | 0 (0) | 0(0) |  |
| m.2831G>A | rs199713564 | 0.23 (3) | 0.27(3) |  |
| m.2833A>G | rs3928312 | 0.07 (1) | 0.09(1) |  |
| m.2835C>T | rs386828897 | 0.15 (2) | 0(0) |  |
| 0m.2849G>A | rs1556422658 | 0 (0) | 0(0) |  |
| m.2850T>C | rs878915790 | 0.47 (6) | 0.72(8) |  |
| m.2851A>G | rs1556422660 | 0.15 (2) | 0(0) |  |
| **SHLP6** |  |  |  |  |
| m.2991T>C | rs1994748230 | 0 (0) | 0(0) |  |
| m.3001G>A | rs28597879 | 0(0) | 0(0) |  |
| m.3010G>A | rs39283060000 | 23.79(300) | 26.51(293) |  |
| m.3022G>A | rs286458310 | 0 (0) | 0(0) |  |
| m.3027T>C | rs199838004 | 1.42 (18) | 0.54(6) |  |