**Supporting information**

**S2 Table.**  HLA-B allele frequencies among the 169,995 CMDP registry donors

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) |
| B\*07:02 | 2.1842  | B\*15:25 | 0.6244  | B\*35:29 | 0.0003  | B\*40:69 | 0.0006  | B\*51:36 | 0.0129  |
| B\*07:05 | 0.7321  | B\*15:27 | 0.8094  | B\*35:30 | 0.0015  | B\*40:70 | 0.0003  | B\*51:39 | 0.0018  |
| B\*07:06 | 0.0577  | B\*15:29 | 0.0094  | B\*35:42 | 0.0021  | B\*40:72 | 0.0003  | B\*51:51 | 0.0003  |
| B\*07:10 | 0.0044  | B\*15:30 | 0.0006  | B\*35:54 | 0.0003  | B\*40:75 | 0.0006  | B\*51:78 | 0.0003  |
| B\*07:31 | 0.0003  | B\*15:32 | 0.2241  | B\*35:64 | 0.0003  | B\*40:78 | 0.0132  | B\*52:01 | 2.8542  |
| B\*07:48 | 0.0009  | B\*15:34 | 0.0003  | B\*35:85 | 0.0003  | B\*40:81 | 0.0006  | B\*52:04 | 0.0003  |
| B\*07:81 | 0.0003  | B\*15:35 | 0.0200  | B\*37:01 | 1.3468  | B\*40:84 | 0.0024  | B\*52:06 | 0.0003  |
| B\*07:91 | 0.0003  | B\*15:38 | 0.0071  | B\*37:02 | 0.0003  | B\*40:87 | 0.0003  | B\*52:11 | 0.0009  |
| B\*08:01 | 0.8621  | B\*15:39 | 0.0006  | B\*37:04 | 0.0035  | B\*40:97 | 0.0079  | B\*53:01 | 0.0329  |
| B\*08:09 | 0.0006  | B\*15:46 | 0.0462  | B\*38:01 | 0.4888  | B\*41:01 | 0.1018  | B\*54:01 | 3.0389  |
| B\*13:01 | 5.0131  | B\*15:56 | 0.0003  | B\*38:02 | 2.6130  | B\*41:02 | 0.0200  | B\*54:16 | 0.0003  |
| B\*13:02 | 5.7690  | B\*15:58 | 0.0935  | B\*38:15 | 0.0035  | B\*42:01 | 0.0109  | B\*54:17 | 0.0071  |
| B\*13:15 | 0.0003  | B\*15:65 | 0.0009  | B\*39:01 | 1.7842  | B\*42:02 | 0.0050  | B\*55:01 | 0.0894  |
| B\*13:16 | 0.0021  | B\*15:66 | 0.0003  | B\*39:04 | 0.0003  | B\*44:02 | 0.9774  | B\*55:02 | 2.4515  |
| B\*13:28 | 0.0003  | B\*15:68 | 0.0047  | B\*39:05 | 0.1782  | B\*44:03 | 2.6295  | B\*55:04 | 0.0524  |
| B\*13:38 | 0.0006  | B\*15:70 | 0.0003  | B\*39:06 | 0.0065  | B\*44:05 | 0.0062  | B\*55:07 | 0.0277  |
| B\*13:40 | 0.0003  | B\*15:78 | 0.0009  | B\*39:09 | 0.0294  | B\*44:06 | 0.0003  | B\*55:12 | 0.0362  |
| B\*13:43 | 0.0038  | B\*15:86 | 0.0009  | B\*39:10 | 0.0003  | B\*44:27 | 0.0021  | B\*55:16 | 0.0006  |
| B\*14:01 | 0.0441  | B\*15:88 | 0.0006  | B\*39:15 | 0.0153  | B\*44:28 | 0.0003  | B\*55:21 | 0.0018  |
| B\*14:02 | 0.2591  | B\*15:93 | 0.0003  | B\*39:24 | 0.0074  | B\*44:29 | 0.0003  | B\*55:26 | 0.0003  |
| B\*15:01 | 4.9166  | B\*18:01 | 0.3991  | B\*39:31 | 0.0062  | B\*44:47 | 0.0003  | B\*55:30 | 0.0009  |
| B\*15:02 | 3.5445  | B\*18:02 | 0.0562  | B\*39:36 | 0.0012  | B\*44:87 | 0.0003  | B\*55:42 | 0.0003  |
| B\*15:03 | 0.0391  | B\*18:03 | 0.0024  | B\*39:38Q | 0.0006  | B\*45:01 | 0.1124  | B\*55:43 | 0.0003  |
| B\*15:05 | 0.1650  | B\*27:02 | 0.0194  | B\*39:58 | 0.0006  | B\*46:01 | 10.2206  | B\*55:48 | 0.0006  |
| B\*15:07 | 0.3180  | B\*27:03 | 0.0091  | B\*40:01 | 9.9559  | B\*46:08 | 0.0003  | B\*55:50 | 0.0003  |
| B\*15:08 | 0.0212  | B\*27:04 | 0.9442  | B\*40:02 | 1.9298  | B\*46:09 | 0.0006  | B\*56:01 | 0.5180  |
| B\*15:09 | 0.0018  | B\*27:05 | 0.7656  | B\*40:03 | 0.2212  | B\*46:14 | 0.0003  | B\*56:03 | 0.0474  |
| B\*15:10 | 0.0077  | B\*27:06 | 0.0550  | B\*40:06 | 3.2322  | B\*46:19 | 0.0003  | B\*56:04 | 0.0838  |
| B\*15:105 | 0.0003  | B\*27:07 | 0.1400  | B\*40:11 | 0.0021  | B\*46:27 | 0.0006  | B\*56:09 | 0.0006  |
| B\*15:11 | 1.8315  | B\*27:14 | 0.0015  | B\*40:114 | 0.0003  | B\*47:01 | 0.0206  | B\*56:10 | 0.0077  |
| B\*15:12 | 0.2665  | B\*27:15 | 0.0053  | B\*40:122 | 0.0006  | B\*48:01 | 2.4615  | B\*56:11 | 0.0003  |
| B\*15:128 | 0.0003  | B\*27:24 | 0.0212  | B\*40:125 | 0.0006  | B\*48:03 | 0.1603  | B\*56:14 | 0.0012  |
| B\*15:13 | 0.0532  | B\*27:25 | 0.0074  | B\*40:141 | 0.0009  | B\*48:04 | 0.0035  | B\*56:18 | 0.0003  |
| B\*15:134 | 0.0003  | B\*27:27 | 0.0003  | B\*40:147 | 0.0003  | B\*48:06 | 0.0009  | B\*56:21 | 0.0006  |
| B\*15:15 | 0.0003  | B\*27:36 | 0.0035  | B\*40:150 | 0.0068  | B\*48:16 | 0.0006  | B\*56:27 | 0.0006  |
| B\*15:152 | 0.0003  | B\*27:40 | 0.0003  | B\*40:151 | 0.0006  | B\*49:01 | 0.1530  | B\*57:01 | 1.0921  |
| B\*15:17 | 0.1885  | B\*27:44 | 0.0003  | B\*40:152 | 0.0003  | B\*49:11 | 0.0003  | B\*57:02 | 0.0024  |
| B\*15:178 | 0.0041  | B\*27:69 | 0.0029  | B\*40:153 | 0.0003  | B\*50:01 | 0.6200  | B\*57:03 | 0.0050  |
| B\*15:18 | 1.3453  | B\*35:01 | 2.8524  | B\*40:25 | 0.0003  | B\*51:01 | 5.6363  | B\*57:29 | 0.0018  |
| B\*15:19 | 0.0368  | B\*35:02 | 0.1971  | B\*40:33 | 0.0003  | B\*51:02 | 1.0565  | B\*58:01 | 5.8693  |
| B\*15:192 | 0.0009  | B\*35:03 | 1.1059  | B\*40:39 | 0.0003  | B\*51:05 | 0.0003  | B\*58:11 | 0.0003  |
| B\*15:198 | 0.0068  | B\*35:04 | 0.0009  | B\*40:40 | 0.0703  | B\*51:06 | 0.0097  | B\*58:12 | 0.0003  |
| B\*15:201 | 0.0003  | B\*35:05 | 0.2644  | B\*40:43 | 0.0009  | B\*51:07 | 0.0329  | B\*58:19 | 0.0003  |
| B\*15:209N | 0.0003  | B\*35:08 | 0.1394  | B\*40:48 | 0.0009  | B\*51:08 | 0.0371  | B\*59:01 | 0.0853  |
| B\*15:21 | 0.0288  | B\*35:10 | 0.0003  | B\*40:49 | 0.0006  | B\*51:09 | 0.0035  | B\*67:01 | 0.7468  |
| B\*15:212 | 0.0003  | B\*35:107 | 0.0003  | B\*40:50 | 0.0032  | B\*51:104 | 0.0003  | B\*67:03 | 0.0009  |
| B\*15:214 | 0.0003  | B\*35:11 | 0.0024  | B\*40:54 | 0.0003  | B\*51:21 | 0.0024  | B\*73:01 | 0.0109  |
| B\*15:215 | 0.0003  | B\*35:137 | 0.0003  | B\*40:55 | 0.0135  | B\*51:22 | 0.0009  | B\*81:02 | 0.1018  |
| B\*15:220 | 0.0038  | B\*35:147 | 0.0003  | B\*40:60 | 0.0003  | B\*51:34 | 0.0006  |  |  |