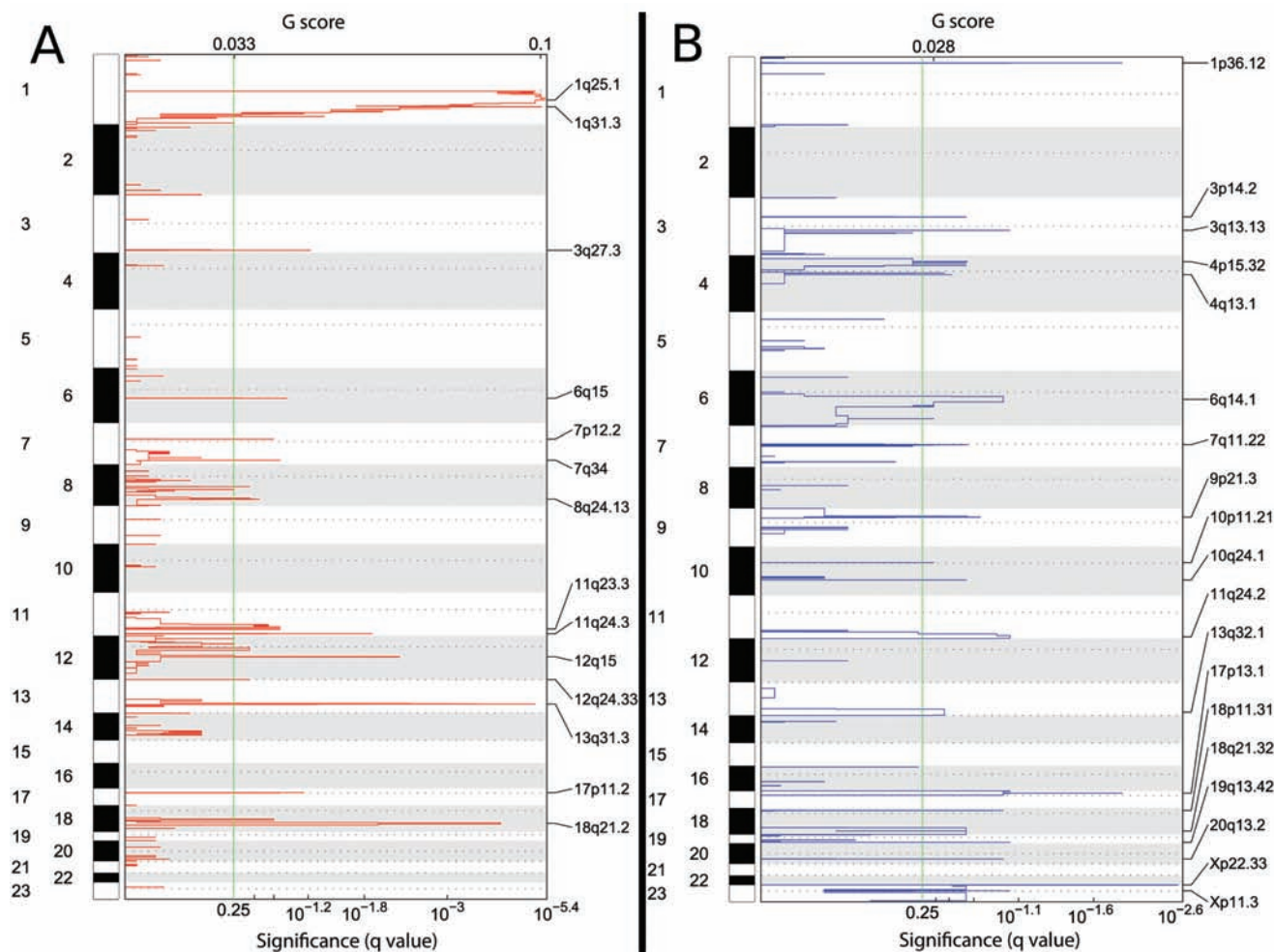


## Detection of genomic aberrations in molecularly defined Burkitt's lymphoma by array-based, high resolution, single nucleotide polymorphism analysis

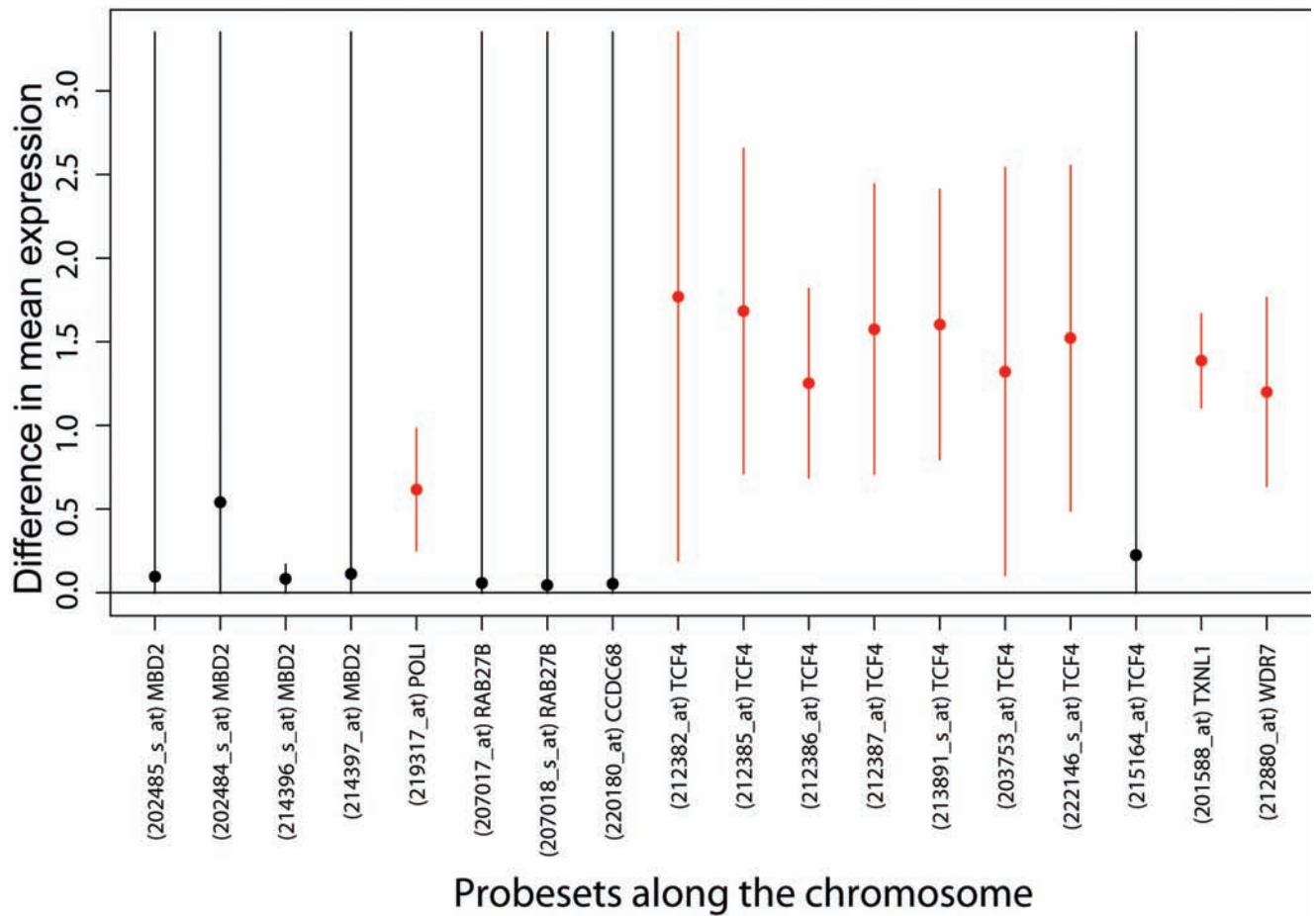
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Online Supplementary Figure S1. Recurrence of gains (A) and losses (B) as given by GISTIC. y-axis: genomic position with chromosomes marked; G-score: significance score provided by the GISTIC algorithm; q-value: statistical significance, corrected for multiple testing. Cytobands are displayed on the right margin to better localize spikes of significance. When comparing the frequencies with those in Figure 1, it is important to note that the GISTIC algorithm also considers the extent of copy number changes.



Online Supplementary Figure S2. Differential gene expression for the gained region 18q21.2. Simultaneous, two-sided 95% bootstrap confidence intervals for the differences in expression between cases with and without gain on 18q21.2. Some of the intervals were truncated to fit the picture. The estimates for the differences in expression are denoted by bold dots. Their positive values reflect increased expression in the cases showing a gain. Significant probe-sets are depicted in red. One of them is *POLI*.

Online Supplementary Table S1. High-level amplifications.

| Array   | Copy number | Chromosome | Start base | Stop base | Start SNP | Stop SNP | Start base_extended | Stop base_extended | Molecular diagnosis | GCB.ABC | Length | Percent_CNP |
|---------|-------------|------------|------------|-----------|-----------|----------|---------------------|--------------------|---------------------|---------|--------|-------------|
| MPI-078 | ≥5          | 11         | 117026813  | 118271578 | 157866    | 158053   | 117008604           | 118321366          | mBL                 | GCB     | 267    | 0.00        |
| MPI-078 | ≥5          | 12         | 40211576   | 46865076  | 163705    | 164296   | 40185579            | 46868499           | mBL                 | GCB     | 1263   | 14.01       |
| MPI-078 | ≥5          | 14         | 76103395   | 78099690  | 184753    | 185035   | 76056803            | 78134215           | mBL                 | GCB     | 466    | 31.76       |
| MPI-078 | ≥5          | 14         | 80108557   | 81754501  | 185199    | 185297   | 80033917            | 81769270           | mBL                 | GCB     | 265    | 9.43        |
| MPI-078 | ≥5          | 14         | 86628568   | 89463608  | 185629    | 185886   | 86596899            | 89467100           | mBL                 | GCB     | 534    | 7.87        |
| MPI-095 | ≥5          | 10         | 1030138    | 1106294   | 132940    | 132945   | 1001958             | 1115769            | mBL                 | GCB     | 9      | 0.00        |
| MPI-095 | ≥5          | 12         | 67281049   | 68369481  | 165990    | 166104   | 67278530            | 68393146           | mBL                 | GCB     | 215    | 0.00        |
| MPI-095 | ≥5          | 13         | 94349071   | 96913193  | 178097    | 178282   | 94338710            | 96975940           | mBL                 | GCB     | 449    | 0.67        |
| MPI-018 | ≥5          | 1          | 149777411  | 151724330 | 21707     | 22025    | 149770061           | 151758544          | mBL                 | GCB     | 319    | 7.52        |
| MPI-018 | ≥5          | 1          | 155175515  | 156116877 | 22517     | 22742    | 155151979           | 156150021          | mBL                 | GCB     | 226    | 4.42        |
| MPI-018 | ≥5          | 1          | 156313411  | 180997834 | 22774     | 27939    | 156301926           | 181026453          | mBL                 | GCB     | 5166   | 20.81       |
| MPI-018 | ≥5          | 10         | 61560943   | 62676104  | 300479    | 300722   | 61547712            | 62700755           | mBL                 | GCB     | 244    | 0.00        |
| MPI-018 | ≥5          | 10         | 63258917   | 63653400  | 300843    | 300911   | 63250873            | 63655389           | mBL                 | GCB     | 69     | 0.00        |
| MPI-018 | ≥5          | 10         | 64475241   | 64888399  | 301128    | 301180   | 64459413            | 64904559           | mBL                 | GCB     | 53     | 15.09       |
| MPI-018 | ≥5          | 17         | 19109505   | 19426327  | 434721    | 434758   | 18857962            | 19455348           | mBL                 | GCB     | 38     | 28.95       |
| MPI-018 | ≥5          | 17         | 19504358   | 20161920  | 434767    | 434851   | 19500060            | 20403550           | mBL                 | GCB     | 85     | 3.53        |
| MPI-018 | ≥5          | 21         | 26741469   | 28129476  | 479307    | 479671   | 26736201            | 28137133           | mBL                 | GCB     | 365    | 18.08       |
| MPI-018 | ≥5          | 21         | 28390206   | 29161249  | 479710    | 479917   | 28375852            | 29161798           | mBL                 | GCB     | 208    | 1.44        |
| MPI-048 | ≥5          | 13         | 90776963   | 90832063  | 381231    | 381243   | 90766136            | 90843580           | mBL                 | GCB     | 13     | 0.00        |
| MPI-048 | ≥5          | 18         | 49306894   | 5555975   | 452186    | 453503   | 49301604            | 55369820           | mBL                 | GCB     | 1318   | 11.00       |
| MPI-071 | ≥5          | 18         | 46033349   | 46192632  | 451420    | 451456   | 46018071            | 46199252           | mBL                 | GCB     | 37     | 16.22       |
| MPI-071 | ≥5          | 18         | 49019835   | 55250645  | 452135    | 453451   | 49015687            | 55260238           | mBL                 | GCB     | 1317   | 11.01       |
| MPI-089 | ≥5          | 1          | 238329580  | 238336668 | 39139     | 39144    | 238321944           | 238338426          | mBL                 | GCB     | 6      | 0.00        |
| MPI-171 | ≥5          | 1          | 166223758  | 166317208 | 25130     | 25180    | 166220861           | 166345649          | mBL                 | GCB     | 51     | 0.00        |
| MPI-171 | ≥5          | 1          | 171855554  | 171859428 | 26157     | 26163    | 171851736           | 171863619          | mBL                 | GCB     | 7      | 0.00        |
| MPI-532 | ≥5          | 11         | 65110065   | 67367795  | 328207    | 328378   | 65015493            | 67383143           | mBL                 | GCB     | 172    | 37.79       |
| MPI-532 | ≥5          | 11         | 71403860   | 73401270  | 328958    | 329147   | 71399055            | 73405476           | mBL                 | GCB     | 190    | 4.74        |
| MPI-532 | ≥5          | 11         | 106685152  | 108051787 | 336044    | 336264   | 106658439           | 108075704          | mBL                 | GCB     | 221    | 45.25       |
| MPI-532 | ≥5          | 11         | 109944451  | 111421334 | 336579    | 336893   | 109909301           | 111443258          | mBL                 | GCB     | 315    | 0.00        |
| MPI-532 | ≥5          | 11         | 112740629  | 113848687 | 337226    | 337350   | 112720384           | 113364827          | mBL                 | GCB     | 125    | 0.00        |
| MPI-532 | ≥5          | 18         | 41463382   | 44010072  | 450484    | 450980   | 41456402            | 44041120           | mBL                 | GCB     | 497    | 5.23        |
| MPI-532 | ≥5          | 18         | 50013288   | 53161776  | 452341    | 452949   | 49999395            | 53164072           | mBL                 | GCB     | 609    | 10.18       |

Online Supplementary Table S2. Homozygous deletions.

| Array   | Copy number | Chromosome | Start base | Stop base | Start SNP | Stop SNP | Start base extended | Stop base extended | Molecular diagnosis | GCB.ABC | Length | Percent CNP |
|---------|-------------|------------|------------|-----------|-----------|----------|---------------------|--------------------|---------------------|---------|--------|-------------|
| MPI-006 | 0           | 7          | 38096725   | 38158081  | 100968    | 100979   | 38011359            | 38176607           | mBL                 | GCB     | 15     | 100.00      |
| MPI-006 | 0           | 9          | 20018452   | 21850428  | 124293    | 124450   | 19990277            | 21880326           | mBL                 | GCB     | 412    | 11.65       |
| MPI-006 | 0           | 9          | 21999960   | 22389693  | 124462    | 124496   | 21990770            | 22402948           | mBL                 | GCB     | 83     | 0.00        |
| MPI-006 | 0           | 14         | 105746660  | 106109648 | 187524    | 187534   | 105553453           | 106142730          | mBL                 | GCB     | 21     | 100.00      |
| MPI-016 | 0           | 22         | 21388199   | 21546762  | 230290    | 230295   | 21276793            | 21576156           | mBL                 | GCB     | 8      | 100.00      |
| MPI-095 | 0           | 22         | 21163978   | 21546762  | 230280    | 230295   | 21105150            | 21576156           | mBL                 | GCB     | 25     | 100.00      |
| MPI-001 | 0           | 22         | 21405412   | 21546762  | 484677    | 484681   | 21389135            | 21576156           | mBL                 | GCB     | 5      | 100.00      |
| MPI-003 | 0           | 14         | 105149735  | 105170875 | 402004    | 402008   | 105071276           | 105238706          | mBL                 | GCB     | 5      | 100.00      |
| MPI-018 | 0           | 10         | 98422661   | 98547438  | 307777    | 307795   | 98407920            | 98587392           | mBL                 | GCB     | 19     | 0.00        |
| MPI-018 | 0           | 17         | 51518046   | 51522852  | 439078    | 439086   | 51512358            | 51532981           | mBL                 | GCB     | 9      | 100.00      |
| MPI-018 | 0           | 22         | 21463635   | 21580110  | 484678    | 484683   | 21405412            | 21582785           | mBL                 | GCB     | 6      | 100.00      |
| MPI-032 | 0           | 1          | 23476031   | 23690889  | 3701      | 3732     | 23457834            | 23714049           | mBL                 | GCB     | 32     | 0.00        |
| MPI-048 | 0           | 22         | 20711383   | 21546762  | 484566    | 484681   | 20711025            | 21576156           | mBL                 | GCB     | 116    | 100.00      |
| MPI-048 | 0           | X          | 638171     | 851166    | 490077    | 490108   | 636217              | 890087             | mBL                 | GCB     | 32     | 100.00      |
| MPI-071 | 0           | 14         | 105547042  | 105835970 | 402012    | 402019   | 105399872           | 105988336          | mBL                 | GCB     | 8      | 100.00      |
| MPI-081 | 0           | 8          | 12264620   | 12286403  | 240783    | 240788   | 12040126            | 12446597           | mBL                 | GCB     | 6      | 100.00      |
| MPI-082 | 0           | 22         | 21163978   | 21546762  | 484657    | 484681   | 21105150            | 21576156           | mBL                 | GCB     | 25     | 100.00      |
| MPI-082 | 0           | X          | 47033985   | 47142737  | 494155    | 494163   | 46975369            | 47150006           | mBL                 | GCB     | 9      | 0.00        |
| MPI-085 | 0           | 14         | 105547042  | 105835970 | 402012    | 402019   | 105399872           | 105988336          | mBL                 | GCB     | 8      | 100.00      |
| MPI-101 | 0           | 6          | 29979615   | 30015940  | 186477    | 186487   | 29957598            | 30023128           | mBL                 | GCB     | 11     | 100.00      |
| MPI-101 | 0           | 9          | 43847424   | 44108554  | 273923    | 273927   | 43618057            | 64197638           | mBL                 | GCB     | 5      | 100.00      |
| MPI-114 | 0           | 6          | 79036117   | 79083405  | 194803    | 194807   | 79019345            | 79109332           | mBL                 | GCB     | 5      | 100.00      |
| MPI-114 | 0           | X          | 22730841   | 22745968  | 492173    | 492178   | 22718153            | 22793958           | mBL                 | GCB     | 6      | 100.00      |
| MPI-171 | 0           | 3          | 75535509   | 75627862  | 96855     | 96861    | 75476955            | 75647561           | mBL                 | GCB     | 7      | 100.00      |
| MPI-528 | 0           | 18         | 62058576   | 62062341  | 454841    | 454846   | 62053230            | 62063122           | mBL                 | GCB     | 6      | 100.00      |
| MPI-528 | 0           | 22         | 21031117   | 21546762  | 484646    | 484681   | 21020620            | 21576156           | mBL                 | GCB     | 36     | 100.00      |
| MPI-529 | 0           | 1          | 23538204   | 23657473  | 3719      | 3726     | 23535004            | 23673235           | mBL                 | GCB     | 8      | 0.00        |
| MPI-529 | 0           | 22         | 21105150   | 21546762  | 484656    | 484681   | 21083648            | 21576156           | mBL                 | GCB     | 26     | 100.00      |
| MPI-532 | 0           | 6          | 29984938   | 30015940  | 186479    | 186487   | 29980936            | 30023128           | mBL                 | GCB     | 9      | 100.00      |
| MPI-532 | 0           | 22         | 21083648   | 21546762  | 484655    | 484681   | 21058712            | 21576156           | mBL                 | GCB     | 27     | 100.00      |

Online Supplementary Table S3. SEE EXCEL FILE

Online Supplementary Table S4. SEE EXCEL FILE

Online Supplementary Table S5. Gene dosage for the miRNA supercluster 17-92 on chromosome 13q31.3.

| miRNA       | Mean expression with gain (A) | Mean expression (B) with normal copy number | $\Delta$ CT: columns A-B | P value (Mann-Whitney-U Test) | Adjusted P value (Bonferroni) |
|-------------|-------------------------------|---|--------------------------|-------------------------------|-------------------------------|
| 17-3p       | 30.67                         | 31.71                                       | -1.05                    | 0.13                          | 1                             |
| 17-5p       | 27.90                         | 29  | -1.10                    | 0.049                         | 0.39                          |
| 18a-probe 1 | 30.79                         | 30.96                                       | -0.178                   | 0.92                          | 1                             |
| 18a-probe 2 | 29.75                         | 30.29                                       | -0.544                   | 0.63                          | 1                             |
| 19a         | 27.31                         | 28.44                                       | -1.12                    | 0.38                          | 1                             |
| 19b         | 24.73                         | 26.15                                       | -1.41                    | 0.085                         | 0.68                          |
| 20a         | 24.53                         | 25.95                                       | -1.42                    | 0.049                         | 0.39                          |
| 92          | 25.00                         | 25.44                                       | -0.437                   | 0.63                          | 1                             |

Expression values are normalised C<sub>T</sub> values (see the Design and Methods section), thus a lower value means higher expression in the cases with gains.