**Supplementary Table 5.** ***BTC1* haplotypes of all plants from the *Beta* panel.** The coding region was sequenced.The position of the SNPs is given relative to the translation start site according to the regarding exons. For each accession, PCR products of 10 plants were pooled and sequenced for haplotype analysis. In case of sequence heterogeneity, all single plants were sequenced and haplotypes were assembled which could result in more than one haplotypes per accession. The nomenclature of polymorphisms was given according to the IUPAC code ([Johnson, 2010](#_ENREF_1)).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exon** | **3** | | | **5** | **6** | | **7** | | | **8** | | | | | | | **9** | | | | | | | | | | **10** |  |
| Seed code | 92 | 224 | 351 | 89 | 64 | 89 | 23 | 75 | 164 | 2 | 9 | 79 | 97 | 154 | 158 | 250 | 29 | 37 | 402 | 435 | 476 | 542 | 616 | 670 | 686 | 814 | 72 | Haplotypes in 10 plants / accession |
| 090023 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 930176 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 130333 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 091645 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 100043 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 092312 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 080339 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 080281 | **G** | **A** | **A** | **C** | **G** | **T** | **C** | **A** | **G** | **C** | **C** | **C** | **C** | **G** | **T** | **G** | **G** | **A** | **A** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **A** | *btc1a* |
| 001684 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **A** | **T** | **A** | **T** | **A** | **A** | **T** | **G** | *BTC1d* |
| 100539 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **A** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1e* |
| 930034 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **A** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1e* |
| 080384 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **A** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1e* |
| 092459 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **A** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1e* |
| 080238 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1g* |
| 080396 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **T** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1h* |
| 080461 | **G** | **C** | **T** | **T** | **A** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **T** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **T** | **A** | **G** | **C** | **G** | *BTC1j* |
| 080287 | **G** | **C** | **T** | **T** | **A** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **T** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **T** | **A** | **G** | **C** | **G** | *BTC1j* |
| 112787 | **T** | **C** | **W** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **A** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **T** | **A** | **G** | **T** | **G** | *BTC1k* |
| 112823 | **T** | **C** | **W** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **A** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **T** | **A** | **G** | **T** | **G** | *BTC1k* |
| 080260 | **T** | **C** | **W** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **M** | **K** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **T** | **A** | **G** | **T** | **G** | *BTC1k* |
| 930181 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **A** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1l* |
| 080313 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **T** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **A** | **A** | **G** | **G** | **T** | **A** | **T** | **A** | **G** | **T** | **G** | *BTC1l* |
| 080468 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **G** | **T** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **C** | **A** | **G** | **T** | **G** | *BTC1m* |
| 080437 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **G** | **T** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **C** | **A** | **G** | **T** | **G** | *BTC1m* |
| 080418 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **G** | **T** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **T** | **G** | **C** | **A** | **G** | **T** | **G** | *BTC1m* |
| 991971 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **G** | **Y** | **C** | **A** | **C** | **G** | **W** | **A** | **G** | **R** | **G** | **G** | **T** | **G** | **Y** | **A** | **G** | **T** | **G** | *BTC1e, BTC1f, BTC1m* |
| 080394 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **K** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **C** | **G** | **T** | **A** | **G** | **T** | **G** | *BTC1n* |
| 080538 | **G** | **C** | **T** | **T** | **R** | **G** | **C** | **G** | **K** | **C** | **C** | **A** | **C** | **K** | **T** | **A** | **G** | **A** | **G** | **G** | **Y** | **G** | **T** | **A** | **G** | **M** | **G** | *BTC1j, BTC1n* |
| 081845 | **G** | **C** | **T** | **T** | **G** | **G** | **C** | **G** | **K** | **C** | **C** | **A** | **C** | **G** | **T** | **A** | **G** | **A** | **G** | **G** | **Y** | **G** | **Y** | **A** | **R** | **T** | **G** | *BTC1i, BTC1m, BTC1n* |
| non-syn. SNP | **\*** | **\*** | **\*** |  | **\*** | **\*** | **\*** |  | **\*** |  | **\*** | **\*** | **\*** | **\*** | **\*** | **\*** | **\*** |  | **\*** | **\*** | **\*** | **\*** |  | **\*** | **\*** |  |  |  |