

| Position on RNO 20 (bp) | Gene Symbol    | Reference (BN) allele | SHR variant (BN.SHR20) | Reference Amino Acid | Variant Amino Acid |
|-------------------------|----------------|-----------------------|------------------------|----------------------|--------------------|
| 3077762                 | <i>Vars2</i>   | T                     | A                      | Ser                  | Thr                |
| 3691116                 | <i>Apom</i>    | T                     | C                      | Met                  | Thr                |
| 4173424                 | <i>Notch4</i>  | A                     | G                      | Val                  | Ala                |
| 4270058                 | <i>Btnl8</i>   | T                     | A                      | Ile                  | Asn                |
| 4304918                 | <i>Btnl7</i>   | C                     | G                      | His                  | Gln                |
| 4308932                 | <i>Btnl7</i>   | T                     | C                      | Trp                  | Arg                |
| 4366798                 | <i>Btnl5</i>   | C                     | G                      | Pro                  | Ala                |
| 4366804                 | <i>Btnl5</i>   | G                     | C                      | Val                  | Leu                |
| 4366907                 | <i>Btnl5</i>   | G                     | A                      | Ala                  | Thr                |
| 4366948                 | <i>Btnl5</i>   | G                     | T                      | Glu                  | Asp                |
| 4366959                 | <i>Btnl5</i>   | C                     | G                      | Pro                  | Arg                |
| 4368527                 | <i>Btnl5</i>   | G                     | A                      | Glu                  | Lys                |
| 4368528                 | <i>Btnl5</i>   | A                     | T                      | Glu                  | Val                |
| 4368540                 | <i>Btnl5</i>   | G                     | A                      | Gly                  | Glu                |
| 4368544                 | <i>Btnl5</i>   | A                     | G                      | Ile                  | Met                |
| 4368545                 | <i>Btnl5</i>   | C                     | T                      | His                  | Tyr                |
| 4824317                 | <i>Slc39a7</i> | G                     | C                      | Asp                  | His                |
| 4824834                 | <i>Slc39a7</i> | C                     | T                      | Thr                  | Met                |
| 5619004                 | <i>Smim29</i>  | G                     | C                      | His                  | Asp                |
| 7767505                 | <i>Cmtr1</i>   | T                     | C                      | Gln                  | Arg                |

**Supplementary Table S3.** Summary of nonsynonymous aminoacid changes resulting from the SHR-derived variants in BN.SHR20 (excluding the *Rt1* and olfactory receptor genes). The complete list of variants is provided in Supplementary Table S2. The genomic position of the variants is given in basepairs (bp) of the rat chromosome 20 (RNO20) according to NCBI *Rattus norvegicus* Annotation Release 108, *Rattus norvegicus* mRatBN7.2 (GCF\_015227675.2 assembly).