**File S1. Descriptions of all supplemental files**.

File S2 contains variant annotations and locations within the RNO5 candidate region (chr5: 15.4 – 26.6 Mb). Genomic sequence of the BN/NHsdMcwi and SS/JrHsdMcwi rat strains was accessed from the Rat Genome Database (http://rgd.mcw.edu/).

File S3 contains the RNAseq gene expression data from mammary tumors that arose in the SS (n = 6) and SS-5BN rats (n = 6). The raw gene expression data are available at SRA with the accession number: PRJNA504606.