|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gene name** | **Mutation\*** | **Chromosomal location** | **Mutation effect** | **Molecular identity** |
| *trpp-8* | C->A | Chr I, 5616196 | AA substitution | Transport protein |
| *ZC239.15* | C->G | Chr II, 3223743 | AA substitution | BTB2 domain containing KCTD10 ortholog |
| *emb-27* | G->C | Chr II, 8160254 | AA substitution | APC subunit, *cdc16* ortholog |
| *Y22D7AL.7* | G->A | Chr III, 1578431 | AA substitution | Unknown protein, some homology to Rouxiella DNA binding response regulator |
| *C50C3.2* | G->T | Chr III, 8188649 | AA substitution | SPTAN1 ortholog (Spectrin) |
| *kin-24* | G->T | Chr IV, 9840056 | AA substitution | Kinase, human FES ortholog |
| *F07C6.4* | C->T | Chr IV, 12809030 | AA substitution | FRMD4B ortholog |
| *F10D2.12* | G->A | Chr V, 7149488 | AA substitution | Hexosyl transferase (putative) |
| *inft-2* | C->A | Chr V, 13003815 | AA substitution | Inverted formin |
| *sru-48* | C->T | Chr X, 5180366 | AA substitution | Serpentine GPCR receptor |
| *F48F7.3* | G->T | Chr X, 13964441 | AA substitution | Galactosyl transferase (putative) |
| *C06G1.6* | G->A | Chr X, 16652703 | AA substitution | PPP2R3B ortholog (putative phosphatase) |
| *fbxb-69* | T->A | Chr I, 14283531 | STOP gained | F-box protein |
| *C33H5.1* | G->T | Chr IV, 7810427 | STOP gained | Nematode-specific putative methyltransferase |
| *bre-5* | G->T | Chr IV, 12050973 | Splice site loss | Galactosyl transferase (putative) |

**Table S3. Unique variants which affect protein coding genes in N2 [S]**

**\***fixed (homozygous) single nucleotide polymorphisms unique to N2 [S] that affect the predicted protein sequence