**Supplemental Table 2: List of *ain-1* and *ain-2* genetic interactors identified in this study and their relevant phenotypes in brief.** RNAi clones are listed alphabetically by gene name. Relevant phenotypes indicated for the given strains are defined in supplemental Table 1.

| **RNAi** | **Phenotype** | | |
| --- | --- | --- | --- |
| ***Gene*** | ***ain-1;rrf-3*** | ***ain-2;rrf-3*** | ***rrf-3*** |
| *abu-1* | Normal | Bsv | Normal |
| *asb-2* | Bsv | Red, F1-Slu | Bsv |
| *B0238.12* | Rup, Bsv | Bsv | Normal |
| *B0281.5* | Rup, Egl | Normal | Normal |
| *bath-43* | Bmd, Bsv | Normal | Normal |
| *C04F5.8* | F0-Slu, Bsv | Bsv | Normal |
| *C06G1.5* | Egl | Red | Bsv |
| *C06G3.8* | Bsv, F0-Slu | Normal | Normal |
| *C08H9.2* | Red, F1-Slu | Red, F1-Slu | Bsv |
| *C24B5.4* | Bsv, F0-Slu | Red | Normal |
| *C25G4.6* | Red | Bsv | Normal |
| *C44B7.2* | F0-Slu, Bsv | Bsv | Normal |
| *C45G9.12* | Rup, F0-Slu, Bsv | Normal | Normal |
| *C50F4.4* | Rup, Egl | Bsv | Normal |
| *calu-1* | Bsv | Bmd, Red | Bsv |
| *capg-1* | Egl, F0-Slu | Emb | Normal |
| *cdc-48.3* | Bmd, Bsv | Bsv | Normal |
| *cdt-2\** | Rup, Bmd, Egl, F1-Slu | Bsv | Bsv |
| *ced-3* | Emb | Bsv | Bsv |
| *ceh-18\** | F0-Slu, Bmd, Bsv | Red | Bsv |
| *ceh-38* | Bsv, F0-Slu, F1-Slu | F0-Slu | Normal |
| *chk-2* | Emb | Emb | Red |
| *col-144* | F0-Slu, Bsv | Normal | Normal |
| *csn-1* | Egl | Red | Bsv |
| *csn-4* | Bmd, Red | Bmd, Emb | Bsv |
| *csn-5* | Bmd, Red | Red | Bsv |
| *cyn-3* | Bmd, Bsv | Bsv | Bsv |
| *cyp-42A1* | F0-Slu | Bsv | Normal |
| *daf-12\** | Rup, Egl, F0-Slu | Bsv | Normal |
| *dcn-1* | Red | Bsv | Bsv |
| *djr-1.1* | Egl, Rup, Bsv | Normal | Normal |
| *dpy-11* | F1-Prl | F1-Prl, Bsv | Bsv |
| *dpy-2* | Red | Red | Bsv |
| *dpy-21\** | Egl, Bmd, F0-Slu | Bsv | Normal |
| *eel-1* | Bmd, Bsv | F0-Slu, F1-Slu, Bsv | Bsv |
| *eff-1* | Bmd, F0-Slu | F0-Slu | Normal |
| *F14D7.3* | Normal | Bsv | Normal |
| *F16B12.6* | Red | Red | Bsv |
| *F21D5.1* | Emb | Emb | Red |
| *F23C8.6* | Egl, F0-Slu | Red, F0-Slu | Bsv |
| *F43D2.3* | F0-Slu, Bsv | Bsv | Normal |
| *F52C6.12* | Bmd, F0-Slu, Bsv | Bsv, F0-Slu | Bsv |
| *F52C6.3* | Egl, Bmd, F0-Slu | Red, F0-Slu | Bsv |
| *F53C3.4* | Bsv | Emb | Normal |
| *fat-3* | Egl, F2-Slu | Red | Bsv |
| *flp-11* | Bsv | Bsv | Normal |
| *gcy-11* | Rup, Bmd, Red | Bsv | Bsv |
| *glh-1* | Bmd, Bsv | Red | Bsv |
| *grl-31* | Egl, F0-Slu,Bmd | Egl | Red |
| *H06I04.1* | Bmd, Bsv | Normal | Normal |
| *his-24* | Bsv, F0-Slu | Red | Normal |
| *hmg-12* | F0-Slu, Bsv | Normal | Normal |
| *hpo-18* | Bsv | Red | Bsv |
| *hrp-1* | Rup, Egl | Red | Bsv |
| *inos-1* | Rup, F0-Slu, Red | Red, F0-Slu | Bsv, F1-Unc |
| *ins-26* | BSV, Rup | Red | Normal |
| *K01C8.1* | Rup, Bmd, F0-Slu, Egl | Egl | Egl |
| *K03B4.2* | F0-Slu, Bsv | Bsv | Normal |
| *K07E12.2* | Rup, Bmd, F0-Slu, Bsv | Normal | Normal |
| *lag-2\** | Rup, Bmd, Bsv | Red | Bsv |
| *lfe-2* | Bsv | Red | Normal |
| *lin-46* | Rup, F0-Slu, Bsv | Bsv | Bsv |
| *lsl-1* | Red | Red | Bsv |
| *lsm-4* | Egl, Unc | Red | Bsv |
| *lst-3\** | Normal | Bsv | Normal |
| *mev-1* | Rup,Red | Bsv | Normal |
| *mig-38* | Bmd, Red, F0-Slu | Bsv, F1-Slu | Bsv |
| *mrpl-11* | Bsv, F0-Slu | Red | Bsv |
| *mrpl-2* | Egl | Red | Red |
| *mrpl-47* | Egl | Red | Bsv |
| *mrps-17* | Bmd, Red, F0-Slu | Bsv | Bsv |
| *msi-1* | Rup, Bmd, Red | Bsv | Normal |
| *nfm-1* | Bmd, Bsv, F0-Slu | Bsv | Normal |
| *nhr-60* | F0-Slu, Bsv | Normal | Normal |
| *pcaf-1* |  | Red, F0-Slu, F1-Slu | Bsv |
| *pfd-2* | Red | Bsv, F1-Prl, F0-Slu | Bsv |
| *pfd-3* | Egl, F0-Slu | Egl | F0-Slu, Bsv |
| *pqn-85* | Red, F0-Slu | Bsv | Bsv |
| *ptr-24* | Bmd, Egl, F0-Slu | Bsv | Bsv |
| *pup-2* | Egl, Bmd, F0-Slu | Emb | Bsv |
| *R11H6.2* | Bmd, Bsv | Bsv | Normal |
| *rack-1* | Egl | Red | Bsv |
| *rad-51* | Egl, Emb | Egl, Emb, F0-Slu | Bsv |
| *ral-1* | Red, F0-Slu | Red | Bsv |
| *rap-1* | Rup. Egl, Bsv | Normal | Normal |
| *rfp-1* | Bmd, Bsv | Red | Bsv |
| *sars-2* | Egl, Red | Egl, Red | Bsv |
| *scl-12* | Normal | Red | Normal |
| *sex-1\** | Emb,F1-Prl | Emb | Bsv |
| *skr-19* | Bmd, Egl, F0-Slu, Red | Red | Bsv |
| *skr-7* | Bsv, F0-Slu | Normal | Normal |
| *smk-1* | Emb | Emb | Bsv |
| *sod-2* | Rup, Bsv | Bsv | Bsv |
| *sod-3* | Bsv | Rup, Bsv | Normal |
| *spe-19* | F0-Slu, Bsv | Bsv | Normal |
| *sss-2* | F0-Slu, Bsv | Bsv | Normal |
| *str-232* | Rup, F0-Slu, Bsv | Normal | Normal |
| *T05B11.1* | Rup, Bmd, F0-Slu, Bsv, F1-Slu | F0-Slu, Bsv | Normal |
| *T12A2.7* | Red | Egl | Bsv |
| *T16H12.1* | Bmd, Red | Red | Bsv |
| *T25D3.4* | F0-Slu, Bsv | Bsv | Bsv |
| *T26A5.4* | Egl, F0-Slu | Red, F1-Slu | Bsv |
| *T27E9.1* | Red | Red | Bsv |
| *tbp-1* | Rup, Bsv | Bsv | Bsv |
| *tpst-1* | Egl, Red | L4 Arrest | Bsv |
| *tsp-17* | Bmd, Egl, F0-Slu | Egl | Egl |
| *unc-39* | Normal | F1-Slu, Bsv | Normal |
| *unc-94* | Red, F0-Slu | Egl | Bsv |
| *vap-1* | Egl, F0-Slu | Normal | Normal |
| *W01A8.5* | Bsv, F0-Slu | Normal | Normal |
| *W02H5.8* | Rup, Egl, Bmd, F0-Slu | Egl | Bsv |
| *W03F9.3* | Bmd, F0-Slu, Bsv | Normal | Normal |
| *W06D12.6* | Rup, Egl, Bmd | Bsv, F1-Prl | Normal |
| *W07G4.3* | Rup, Bmd, Bsv, F1-Slu | Normal | Normal |
| *wrt-1* | Bsv, Bmd, F0-Slu | Red | Bsv |
| *Y102E9.3* | Rup, Bmd, Red, F0-Slu | Bmd, Red, F0-Slu | Bsv |
| *Y17D7B.4* | Rup, Red, F0-Slu | Bsv | Bsv |
| *Y39C12A.1\** | Bmd, Red | Bmd, Egl | Bsv |
| *Y54G2A.26* | Bsv, F0-Slu | Bsv | Bsv |
| *Y59A8B.10* | Bmd, F0-Slu | Bsv | Normal |
| *Y95B8A.6* | Bmd, F0-Slu, Bsv | Bsv | Bsv |
| *ZC395.10* | Red, F0-Slu | Bsv | Bsv |
| *ZK381.2* | Rup, Bmd, Bsv | Bsv | Bsv |
| *ZK484.1* | Bmd, Bsv | Bsv | Normal |
| *ZK652.8* | Rup, Bmd | Bsv | Normal |
| *ztf-8* | Bsv | Bsv | Normal |

\*These genes have previously been shown to interact with the miRNA pathway.