**S2 Table. *C. elegans* strains used in this study**

|  |  |  |  |
| --- | --- | --- | --- |
| **strain name** | **genotype** | **protein expressed** | **Figure(s)** |
| VK2620 | *vkEx2620[*P*nhx-2aman-2::CemOrange2;*P*myo-2GFP]* | AMAN-2::CemOrange2 | 2 and 3 |
| VK2664 | *vkEx2664[*P*nhx-2CemOrange2::tram-1;*P*myo-2GFP]* | CemOrange2::TRAM-1 | 2 |
| VK2666 | *vkEx2666[*P*nhx-2CemOrange2::rab-7;*P*myo-2GFP]* | CemOrange2::RAB-7 | 2 and 3 |
| VK2671 | *vkEx2671[*P*nhx-2CemOrange2::rab-5;*P*myo-2GFP]* | CemOrange2::RAB-5 | 2 and 3 |
| VK2674 | *vkEx2674[*P*nhx-2CemOrange2::pisy-1;*P*myo-2GFP]* | CemOrange2::PISY-1 | 2 |
| VK2688 | *vkEx2688[*P*nhx-2CemOrange2::cup-5;* P*myo-2GFP]* | CemOrange2::CUP-5 | 2 and 3 |
| VK2697 | *vkIs2697[*P*nhx-2lmp-1::CemOrange2;*P*myo-2GFP]* | LMP-1::CemOrange2 | 2, 3 and 4 |
| VK2700 | *vkEx2700[*P*nhx-2CemOrange2::SKL;*P*myo-2GFP]* **\*** | CemOrange2::SKL | 2 |
| VK2702 | *vkEx2702[*P*nhx-2mtCemOrange2;*P*myo-2GFP]* **#** | mtCemOrange2 | 2 and 3 |
| VK2728 | *vkEx2728[*P*nhx-2sqst-1::CemOrange2;*P*myo-2GFP]* | SQST-1::CemOrange2 | 2 |
| VK2733 | *vkEx2733[*P*nhx-2NLSSV-40::CemOrange2::NLSegl-13;*P*myo-2GFP]* **†** | NLSSV-40::CemOrange2::NLSegl-13 | 2 |
| VK2734 | *vkIs2734[*P*nhx-2lmn-1::CemOrange2;*P*myo-2GFP]* | LMN-1::CemOrange2 | 2 |
| VK2735 | *vkEx2735[*P*nhx-2glo-1::CemOrange2;*P*myo-2GFP]* | GLO-1::CemOrange2 | 2 and S1A-C |
| VK2738 | *vkEx2738[*P*nhx-2CemOrange2::lgg-1;*P*myo-2GFP]* | CemOrange2::LGG-1 | 2 |
| VK2748 | *vkEx2748[*P*nhx-2CemOrange2::tram-1;*P*nhx-2GFP::KDEL]* | CemOrange2::TRAM-1; GFP::KDEL | 3 |
| VK2749 | *vkIs2749[*P*nhx-2lmp-1::CemOrange2;*P*nhx-2GFP::ATZ;*P*nhx-2mKate2::lgg-1*;P*myo-2GFP*;P*myo-2mCherry]* | LMP-1::CemOrange2; GFP::ATZ; mKate2::lgg-1 | 6 |
| VK2755 | *vkEx2755[*P*nhx-2CemOrange2;*P*myo-2GFP]* | CemOrange2 | 1 |
| VK2756 | *vkEx2756[*P*nhx-2CemCardinal2;*P*myo-2GFP]* | CemCardinal2 | 1 |
| VK2757 | *vkEx2757[*P*nhx-2CemNeptune2.5;*P*myo-2GFP]* | CemNeptune2.5 | 1 |
| VK2838 | *vkEx2838[*P*nhx-2CemOrange2::SKL;Pvha-6GFP::DAF-22;*P*myo-2GFP]* | CemOrange2::SKL; GFP::DAF-22 | 3 |
| VK2877 | *vkIs2877[*P*nhx-2sqst-1::CemOrange2;*P*myo-2GFP]* | SQST-1::CemOrange2 | 5 |
| VK2878 | *vkIs2878[*P*nhx-2CemOrange2::lgg-1;*P*myo-2GFP]* | CemOrange2::LGG-1 | 5 |
| VK2881 | *vkIs2881[*P*nhx-2glo-1::CemOrange2;*P*ges-1glo-1::GFP;*P*myo-2GFP]* | GLO-1::CemOrange2; GLO-1::GFP | S1G-I |
| VK2882 | *vkIs2882[*P*nhx-2glo-1::CemOrange2;*P*vha-6lmp-1::GFP;*P*myo-2GFP]* | GLO-1::CemOrange2; LMP-1::GFP | 6 and S1D-F |
| VK2883 | *vkEx2883[*P*nhx-2aqp-1::CemOrange2;*P*myo-2GFP]* | AQP-1::CemOrange2 | 2 and 3 |
| VK3160 | *vkEX3160[*P*nhx-2abt-4mKate2;*P*nhx-2CemOrange2::tram-1]* | ABT-4::mKate2; CemOrange2::TRAM-1 | 7 |
| VK3161 | *vkEX3161[*P*nhx-2abt-4L162PmKate2;*P*nhx-2CemOrange2::tram-1]* | ABT-4L162P::mKate2; CemOrange2::TRAM-1 | 7 |

\*Peroxisome target sequence = SKL

**#**mt (mitochondria target sequence) = MLSLRQSIRFFKPATRTLCSSRTLL

**†**NLSSV-40 = MAPKKKRKV; NLSegl-13 = MSRRRKANPTKLSENAKKLAKEVEN