

File S1

List of transgenic lines

Chimeric GCY receptor experiments:

OH11250 *gcy-1(tm2669)II; otEx5076* [FL *gcy-1; elt-2::gfp*]
OH11251 *gcy-1(tm2669)II; otEx5077* [pHKS019; *elt-2::gfp*], line #1
OH11252 *gcy-1(tm2669)II; otEx5078* [pHKS019; *elt-2::gfp*], line #2
OH11253 *gcy-1(tm2669)II; otEx5079* [pHKS019; *elt-2::gfp*], line #3
OH11254 *gcy-1(tm2669)II; otEx5080* [pHKS020; *elt-2::gfp*], line #1
OH11255 *gcy-1(tm2669)II; otEx5081* [pHKS020; *elt-2::gfp*], line #2
OH11256 *gcy-1(tm2669)II; otEx5082* [pHKS020; *elt-2::gfp*], line #3
OH11257 *gcy-1(tm2669)II; otEx5083* [pHKS018; *elt-2::gfp*], line #1
OH11258 *gcy-1(tm2669)II; otEx5084* [pHKS018; *elt-2::gfp*], line #2
OH11259 *gcy-1(tm2669)II; otEx5085* [pHKS018; *elt-2::gfp*], line #3
OH11260 *gcy-1(tm2669)II; otEx5086* [pHKS017; *elt-2::gfp*], line #1
OH11261 *gcy-1(tm2669)II; otEx5087* [pHKS017; *elt-2::gfp*], line #2
OH11262 *gcy-1(tm2669)II; otEx5088* [pHKS017; *elt-2::gfp*], line #3
OH11286 *gcy-4(tm1653)II; otEx5101* [FL *gcy-4; elt-2::gfp*]
OH11287 *gcy-4(tm1653)II; otEx5102* [pHKS015; *elt-2::gfp*], line #1
OH11288 *gcy-4(tm1653)II; otEx5103* [pHKS015; *elt-2::gfp*], line #2
OH11289 *gcy-4(tm1653)II; otEx5104* [pHKS015; *elt-2::gfp*], line #3
OH11290 *gcy-4(tm1653)II; otEx5105* [pHKS016; *elt-2::gfp*], line #1
OH11291 *gcy-4(tm1653)II; otEx5106* [pHKS016; *elt-2::gfp*], line #2
OH11292 *gcy-4(tm1653)II; otEx5107* [pHKS016; *elt-2::gfp*], line #3
OH11293 *gcy-4(tm1653)II; otEx5086* [pHKS017; *elt-2::gfp*], line #1
OH11294 *gcy-4(tm1653)II; otEx5087* [pHKS017; *elt-2::gfp*], line #2
OH11295 *gcy-4(tm1653)II; otEx5088* [pHKS017; *elt-2::gfp*], line #3
OH11296 *gcy-4(tm1653)II; otEx5083* [pHKS018; *elt-2::gfp*], line #1
OH11297 *gcy-4(tm1653)II; otEx5084* [pHKS018; *elt-2::gfp*], line #2

OH11298 *gcy-4(tm1653)II; otEx5085* [pHKS018; *elt-2::gfp*], line #3
OH11324 *gcy-22(tm2364)V; otEx5210* [FL *gcy-22; elt-2::gfp*]
OH11325 *gcy-22(tm2364)V; otEx5080* [pHKS020; *elt-2::gfp*], line #1
OH11326 *gcy-22(tm2364)V; otEx5081* [pHKS020; *elt-2::gfp*], line #2
OH11327 *gcy-22(tm2364)V; otEx5082* [pHKS020; *elt-2::gfp*], line #3
OH11328 *gcy-22(tm2364)V; otEx5077* [pHKS019; *elt-2::gfp*], line #1
OH11329 *gcy-22(tm2364)V; otEx5078* [pHKS019; *elt-2::gfp*], line #2
OH11330 *gcy-22(tm2364)V; otEx5079* [pHKS019; *elt-2::gfp*], line #3
OH11331 *gcy-22(tm2364)V; otEx5105* [pHKS016; *elt-2::gfp*], line #1
OH11332 *gcy-22(tm2364)V; otEx5106* [pHKS016; *elt-2::gfp*], line #2
OH11333 *gcy-22(tm2364)V; otEx5107* [pHKS016; *elt-2::gfp*], line #3
OH11334 *gcy-22(tm2364)V; otEx5102* [pHKS015; *elt-2::gfp*], line #1
OH11335 *gcy-22(tm2364)V; otEx5103* [pHKS015; *elt-2::gfp*], line #2
OH11336 *gcy-22(tm2364)V; otEx5104* [pHKS015; *elt-2::gfp*], line #3

Pansensory heterologous expression:

OH11231 *gcy-4(tm1653)II; otEx5067* [pHKS013; *elt-2::DsRed*], line #1
OH11232 *gcy-4(tm1653)II; otEx5068* [pHKS013; *elt-2::DsRed*], line #2
OH11233 *gcy-4(tm1653)II; otEx5069* [pHKS013; *elt-2::DsRed*], line #3
OH11230 *gcy-4(tm1653)II; otIs398* [pHKS013; *elt-2::DsRed*]
OH11234 *gcy-22(tm2364)V; otEx5070* [pHKS014; *elt-2::gfp*], line #1
OH11235 *gcy-22(tm2364)V; otEx5071* [pHKS014; *elt-2::gfp*], line #2
OH11236 *gcy-22(tm2364)V; otEx5072* [pHKS014; *elt-2::gfp*], line #3
OH11237 *che-1(ot66)I; otIs398* (integrated *otEx5068*) [pHKS013; *elt-2::DsRed*]
OH11239 *che-1(ot66)I; otEx5071* [pHKS014; *elt-2::gfp*]
OH11242 *che-1(ot66)I; otIs398 otEx5071*

ASI heterologous expression:

OH11783 *che-1(ot66)I; otEx5349* [pHKS031; *myo-2::gfp*], line #1

OH11785 *che-1*(ot66)*l*; otEx5351 [pHKS031; *myo-2::gfp*], line #2
OH11786 *che-1*(ot66)*l*; otEx5352 [pHKS031; *myo-2::gfp*], line #3
OH11787 *che-1*(ot66)*l*; otEx5353 [pHKS032; *myo-2::gfp*], line #1
OH11788 *che-1*(ot66)*l*; otEx5354 [pHKS032; *myo-2::gfp*], line #2
OH11789 *che-1*(ot66)*l*; otEx5355 [pHKS032; *myo-2::gfp*], line #3
OH11793 *che-1*(ot66)*l*; otEx5359 [pHKS031,pHKS032; *myo-2::gfp*], line #1
OH11794 *che-1*(ot66)*l*; otEx5360 [pHKS031,pHKS032; *myo-2::gfp*], line #2
OH11795 *che-1*(ot66)*l*; otEx5361 [pHKS031,pHKS032; *myo-2::gfp*], line #3

***che-7* mutant analysis**

OH11226 *che-7*(e1128)*V*; otEx5063 [*che-7^{fosmid}*; *elt-2::gfp*]

***che-6* mutant analysis**

OH11227 *che-6*(e1126)*IV*; otEx5064 [FL *che-6*; *elt-2::gfp*], line #1
OH11228 *che-6*(e1126)*IV*; otEx5065 [FL *che-6* ; *elt-2::gfp*], line #2
OH11229 *che-6*(e1126)*IV*; otEx5066 [FL *che-6*; *elt-2::gfp*], line #3
OH11380 *che-6*(e1126)*IV*; otEx5154 [pHKS021; *elt-2::gfp*], line #1
OH11381 *che-6*(e1126)*IV*; otEx5155 [pHKS021; *elt-2::gfp*], line #2
OH11382 *che-6*(e1126)*IV*; otEx5156 [pHKS021; *elt-2::gfp*], line #3