

P33904--Rhizobium radiobacter/18-167
P33907--Agrobacterium fabrum strain_C58/18-167
I9WD62--Novosphingobium_sp._Rr_2-17/17-162
AOA519QV08--Novosphingobium_sp./17-162
AOA08BZ84--Novosphingobium_subterraneum/16-160
AOA08B9A36--Novosphingobium_subterraneum/15-160
AOA08B9A36--Novosphingobium_subterraneum/15-160
AOA2W5NAM5--Novosphingobium_pentatomatorivans/17-162
AOA2W5NIA3--Novosphingobium_pentatomatorivans/17-162
G6EDM6--Novosphingobium_pentatomatorivans_U56-1/20-165
AOA1D8AG65--Novosphingobium_resinovorum/18-168
AOA1D8A2R6--Novosphingobium_resinovorum/21-166
AOA7W6FZM7--Novosphingobium_fluoreum/17-162
AOA7X1FRW9--Novosphingobium_flavum/17-162
AOA1E4MBA5--Novosphingobium_sp._SCN_66-18/15-160
AOA1W2DYO8--Novosphingobium_sp._B1/15-160
AOA1U6I94--Novosphingobium_mathurense/17-162
AOA2Z5E187--Novosphingobium_sp._P6W/17-162
F6IM71--Novosphingobium_sp._P91Y/17-162
AOA081ZFC7--Novosphingobium_malaysiense/17-162
AOA158S055--Novosphingobium_sp._KN65_2/17-162
AOA5D0HWS2--Novosphingobium_sp._BWI/20-165
AOA0J7XNR2--Novosphingobium_barchaimii_LL02/17-162
AOA2K2G502--Novosphingobium_guangzhouense/17-162
AOA720BU26--Novosphingobium_marinum/82-227
AOA7X8NW25--Novosphingobium_sp._ERW19/15-160
AOA7M2XEF3--Novosphingobium_sp._E52-1/15-160
AOA7W6EV27--Novosphingobium_hassiacum/18-163
AOA0N0JG95--Novosphingobium_sp._AAP1/22-167
AOA7W5MR48--Novosphingobium_sp._BK369/30-175
AOA2N0H508--Novosphingobium_kunmingense/20-165
AOA031JXH4--Novosphingobium_resinovorum/17-162
AOA2Z5EA44--Novosphingobium_sp._P6W/17-162
AOA031K5V8--Novosphingobium_resinovorum/17-162
J3AN03--Novosphingobium_sp._AP12/21-166
F6IC11--Novosphingobium_sp._P91Y/16-161
AOA158S729--Novosphingobium_sp._KN65_2/16-161
AOA1U6IX62--Novosphingobium_mathurense/16-161
AOA5D0WF10--Novosphingobium_sp._BWI/17-162
AOA102D515--Novosphingobium_sp._Fuku2-ISO-50/17-162
AOA6H9HEL6--Novosphingobium_sp._TCA1/17-162
AOA0QC4795--Novosphingobium_sp._Lear2/17-162
AOA8E2KTW7--Novosphingobium_sp._63-71/17-162
AOA3B7DN93--Novosphingobium_sp._THN1/16-160
AOA258VZ84--Novosphingobium_sp._28-62/57/16-160
AOA7X8PAJ0--Novosphingobium_sp._ERNO/16-160
AOA1W7MD68--Novosphingobium_sp._MD-1/16-160
AOA7X8RU42--Novosphingobium_sp._ERW19/16-160
AOA7M2XAAQ0--Novosphingobium_sp._E52-1/16-160
AOA7Y0BSW5--Novosphingobium_olei/15-160
AOA1E4MA02--Novosphingobium_sp._SCN_66-18/16-161
AOA259DV51--Novosphingobium_sp._17-62/19/16-161
AOA6H9H528--Novosphingobium_sp._TCA1/17-162
AOA4R3STF7--Novosphingobium_sp._PhB5/17-162
AOA4V6NHZ7--Novosphingobium_sp._PhB1/65/17-162
AOA28HNC8--Novosphingobium_sp._PC22D/16-161
AOA147EHR3--Novosphingobium_barchaimii/17-162
AOA5D0XP27--Novosphingobium_sp._BWI/17-162
AOA0B1ZDG2--Novosphingobium_malaysiense/16-161
AOA615WV70--Novosphingobium_sp._Gsoil_351/17-162

218 LKQMHRLLAEVFGNRLKWDVAIEDGG-ERDOYELSPTYILATF--GGQRVVGCA-LLAPS GPTMLERTF PQLLATGSLSATTAMIETSRFCVDTTLPTRAGRQLHLATLTMFAGIIEWSMANGYDEIVTATDLRFERILKRA GWPMTRLG 167
219 LKQMHRLLAEVFGNRLKWDVSI IAGE-ERDOYNFKPSYLIAIT-DSGR-VAGCV-LLACGPTMLREQTFSQLLEMGLAASHGVSSRFCVDTSLVSRDASQLHLATLTMFAGIIEWSMASGYTEIVTATDLRFERILKRA GWPMRRLG 167
220 LRNFMEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
221 FRTMHEDKKVFDVLTNWTVP-HDGR-ADQYDTHADYLI LRDVAVSGL-HLGSVRLPTTRQGISLGLFPMCLA-GVPVCPADTFFITRFLDRSL----NARERRDVNMLVHALATFIAEAGISRYCAVAGLGWFRQIERFGWS CRALGA 160
222 LRAMFAAKKAVFDLLGWDLPLVLAGOYEMDQDDEHARYLISLSD--NGD-HLASARLLPTTRRQI LSGLFPMLCA-GVPVCPADTFFITRFLDRSL----NARERRDVNMLVHALATFIAEAGISRYCAVAGLGWFRQIERFGWS CRALGA 160
223 LRAMFAAKKAVFDLLGWDLPLVLAGOYEMDQDDEHARYLISLSD--NGD-HLASARLLPTTRRQI LSGLFPMLCA-GVPVCPADTFFITRFLDRSL----NARERRDVNMLVHALATFIAEAGISRYCAVAGLGWFRQIERFGWS CRALGA 160
224 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
225 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
226 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
227 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
228 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
229 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
230 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
231 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
232 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
233 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
234 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
235 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
236 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
237 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
238 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
239 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
240 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
241 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
242 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
243 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
244 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
245 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
246 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
247 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
248 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
249 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162
250 LRSMFEARKRVIDLLRNDLPLVLAGRFVDRFNDNKATYI LAD-TDGA-HRASARLLPTTEPHI LDTLFAQLCE-EALPRDPTTMEITRFLERKS----NAVERRARDEIHAL VAFGLANGIKRYTGAVEVFWRLQILSFGWRCRLGR 162