

Sup. Data5: All clusters and their similarity to the other Streptomyces.(Please click the link below to access the details.)

<https://antismash.secondarymetabolites.org/upload/bacteria-5632323e-f894-4250-98c1-2e29200883a5/index.html#>

Cluster 1:

Query sequence



NZ_SOPG01000002 (393700-444788): Streptomyces sp. H23 NODE 2 length 611028 co... (91% of genes show similarity),



NZ_CP054920 (161804-212211): Streptomyces sp. NA03103 chromosome, complete ge... (91% of genes show similarity),



NZ_CP034353 (202469-252906): Streptomyces sp. KPB2 chromosome, complete genome (90% of genes show similarity),



NZ_WHZR01000001 (109736-160575): Streptomyces sp. OM5714 A912 AS4 SC1 R2, who... (91% of genes show similarity)



NZ_CP045547 (177469-227780): Streptomyces sp. SYP-A7193 chromosome, complete ... (91% of genes show similarity),



NZ_CP009754 (208580-258556): Streptomyces sp. CCM MD2014 chromosome, complete... (82% of genes show similarity)



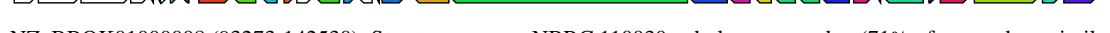
NZ_KZ195577 (128773-179449): Streptomyces sp. CS159 scaffold00001, whole geno... (90% of genes show similarity), N



NZ_WXVT01000001 (109767-160087): Streptomyces sp. KO7888 A913 AS4 SC1 R3, who... (90% of genes show similarity)



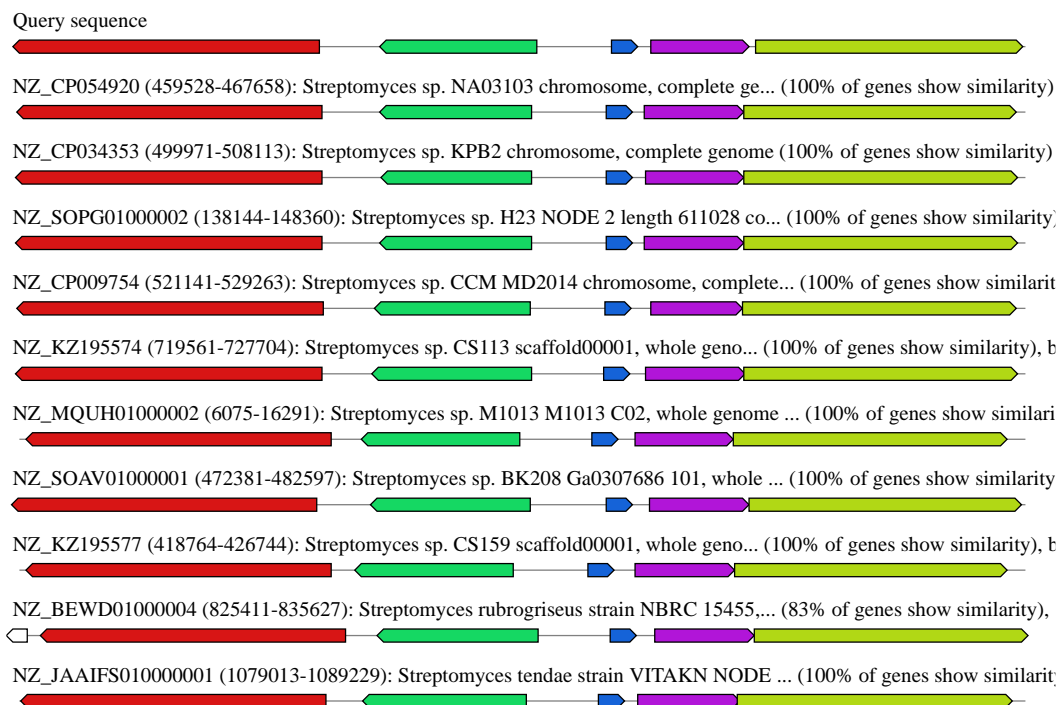
NZ_SOAV01000001 (207564-257247): Streptomyces sp. BK208 Ga0307686 101, whole ... (74% of genes show similarity)



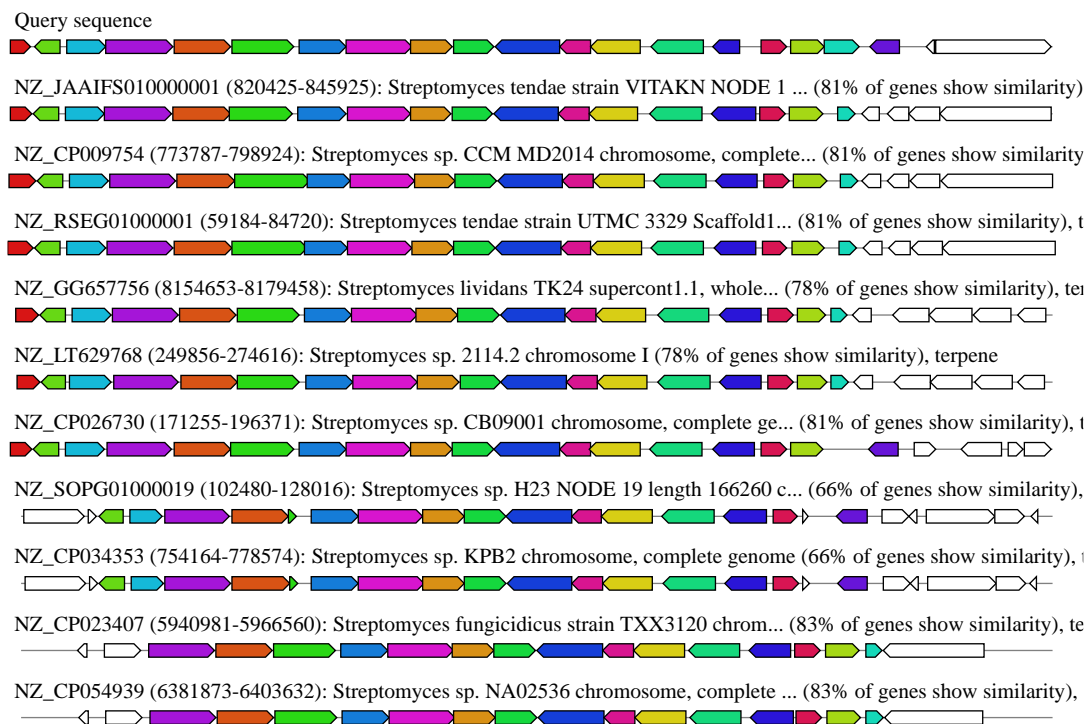
NZ_BBOK01000008 (93273-142530): Streptomyces sp. NBRC 110030, whole genome sh... (71% of genes show similarity)



Cluster 2:



Cluster 3:



Cluster 4:

Query sequence



NZ_CP054920 (729554-829906): *Streptomyces* sp. NA03103 chromosome, complete ge... (96% of genes show similarity),



NZ_CP034353 (782333-884158): *Streptomyces* sp. KPB2 chromosome, complete genome (95% of genes show similarity),



NZ_CP009754 (822747-919295): *Streptomyces* sp. CCM MD2014 chromosome, complete... (80% of genes show similarity)



NZ_CP048641 (8580454-8676832): *Streptomyces aureovercillatus* strain HN6 chr... (40% of genes show similarity), NRP



NZ_KZ195577 (2009280-2100187): *Streptomyces* sp. CS159 scaffold00001, whole ge... (36% of genes show similarity), N



NZ_CP045547 (2157096-2211133): *Streptomyces* sp. SYP-A7193 chromosome, complet... (56% of genes show similarity),



NZ_KE384521 (817047-874204): *Streptomyces* sp. CNS606 K304DRAFT scaffold00001.... (37% of genes show similarity)



NC_015953 (810993-863842): *Streptomyces* sp. SirexAA-E, complete sequence (46% of genes show similarity), NRPS



NZ_WWGT01000010 (47206-100473): *Streptomyces* sp. SID8358 SID8358.c10, whole g... (45% of genes show similarity)



NZ_CP029601 (1927434-1979808): *Streptomyces* sp. WAC 01438 chromosome, complet... (43% of genes show similarity),



Cluster 5:

Query sequence



NZ_CP009754 (1043336-1069144): *Streptomyces* sp. CCM MD2014 chromosome, comple... (100% of genes show similari



NZ_CP045547 (1125038-1150932): *Streptomyces* sp. SYP-A7193 chromosome, complet... (100% of genes show similarity)



NZ_BBOK01000011 (408408-435138): *Streptomyces* sp. NBRC 110030, whole genome s... (100% of genes show similarit



NZ_CP029788 (7054238-7080941): *Streptomyces actuosus* strain ATCC 25421 chromo... (100% of genes show similarity),



NZ_CP042278 (848512-874451): *Streptomyces* sp. WAC06273 strain WAC6273 substr.... (100% of genes show similarity),



NZ_CP034353 (1008147-1033932): *Streptomyces* sp. KPB2 chromosome, complete genome (100% of genes show similarit



NZ_CP054920 (953221-979018): *Streptomyces* sp. NA03103 chromosome, complete ge... (100% of genes show similarity)



NZ_SOPG01000008 (3997-30730): *Streptomyces* sp. H23 NODE 8 length 396604 cov 2... (100% of genes show similarity)



NZ_KZ195577 (851431-877326): *Streptomyces* sp. CS159 scaffold00001, whole geno... (100% of genes show similarity), t



NZ_LT629768 (7535330-7561146): *Streptomyces* sp. 2114.2 chromosome I (100% of genes show similarity), terpene



Cluster 6:

Query sequence



NZ_CP009754 (1130133-1152173): *Streptomyces* sp. CCM MD2014 chromosome, comple... (85% of genes show similarity)



NZ_LT629768 (7439208-7461905): *Streptomyces* sp. 2114.2 chromosome I (94% of genes show similarity), lanthipeptide



NZ_CP042324 (7410747-7428526): *Streptomyces coelicolor* A3(2) strain CFB NBC 0... (94% of genes show similarity), lai



NZ_GG657756 (1086740-1104516): *Streptomyces lividans* TK24 supercont1.1, whole... (94% of genes show similarity), lai



NZ_KZ195574 (1317552-1335694): *Streptomyces* sp. CS113 scaffold00001, whole ge... (77% of genes show similarity), lai



NZ_BEWD01000001 (400231-422952): *Streptomyces rubrogriseus* strain NBRC 15455,... (77% of genes show similarity),



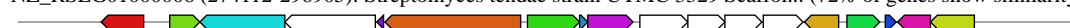
NZ_JAAIFS010000001 (528358-551100): *Streptomyces tendae* strain VITAKN NODE 1 ... (77% of genes show similarity)



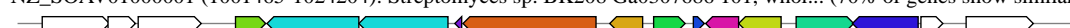
NZ_MQUH01000025 (295418-318064): *Streptomyces* sp. M1013 M1013 C25, whole geno... (72% of genes show similarity)



NZ_RSEG01000006 (274112-296905): *Streptomyces tendae* strain UTM C 3329 Scaffol... (72% of genes show similarity), l



NZ_SOAV01000001 (1001465-1024204): *Streptomyces* sp. BK208 Ga0307686 101, whol... (70% of genes show similarity)



Cluster 7:

Query sequence



NZ_RSEG01000027 (55688-68908): *Streptomyces tendae* strain UTM C 3329 Scaffold2... (75% of genes show similarity), s



NZ_SOPG01000001 (613350-626590): *Streptomyces* sp. H23 NODE 1 length 804249 co... (75% of genes show similarity),



NZ_CP034353 (1572437-1584900): *Streptomyces* sp. KPB2 chromosome, complete genome (75% of genes show similarity)



NZ_CP054920 (1541972-1554434): *Streptomyces* sp. NA03103 chromosome, complete ... (75% of genes show similarity),



NZ_CP045547 (1783373-1795837): *Streptomyces* sp. SYP-A7193 chromosome, complet... (75% of genes show similarity),



NZ_MQUH01000024 (20982-34208): *Streptomyces* sp. M1013 M1013 C24, whole genome... (72% of genes show similarity)



NZ_GG657756 (1566469-1578183): *Streptomyces lividans* TK24 supercont1.1, whole... (72% of genes show similarity), sic



NZ_KZ195574 (1772700-1784412): *Streptomyces* sp. CS113 scaffold00001, whole ge... (72% of genes show similarity), sic



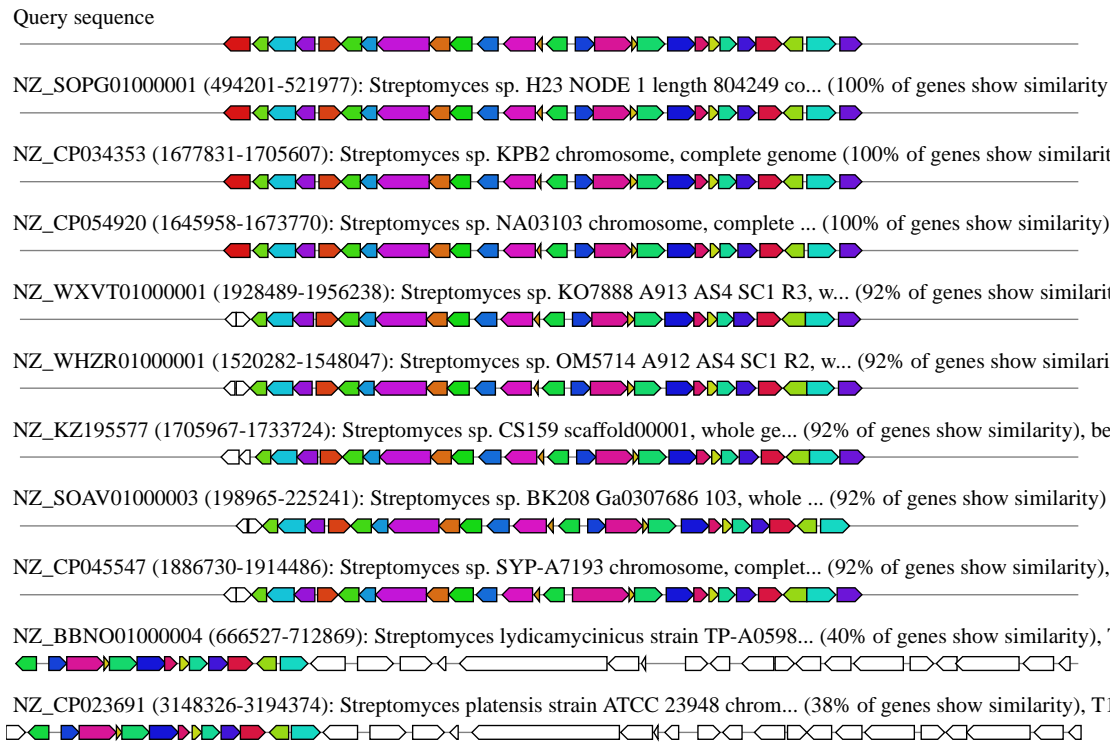
NZ_CP042324 (6842428-6855636): *Streptomyces coelicolor* A3(2) strain CFB NBC 0... (72% of genes show similarity), sic



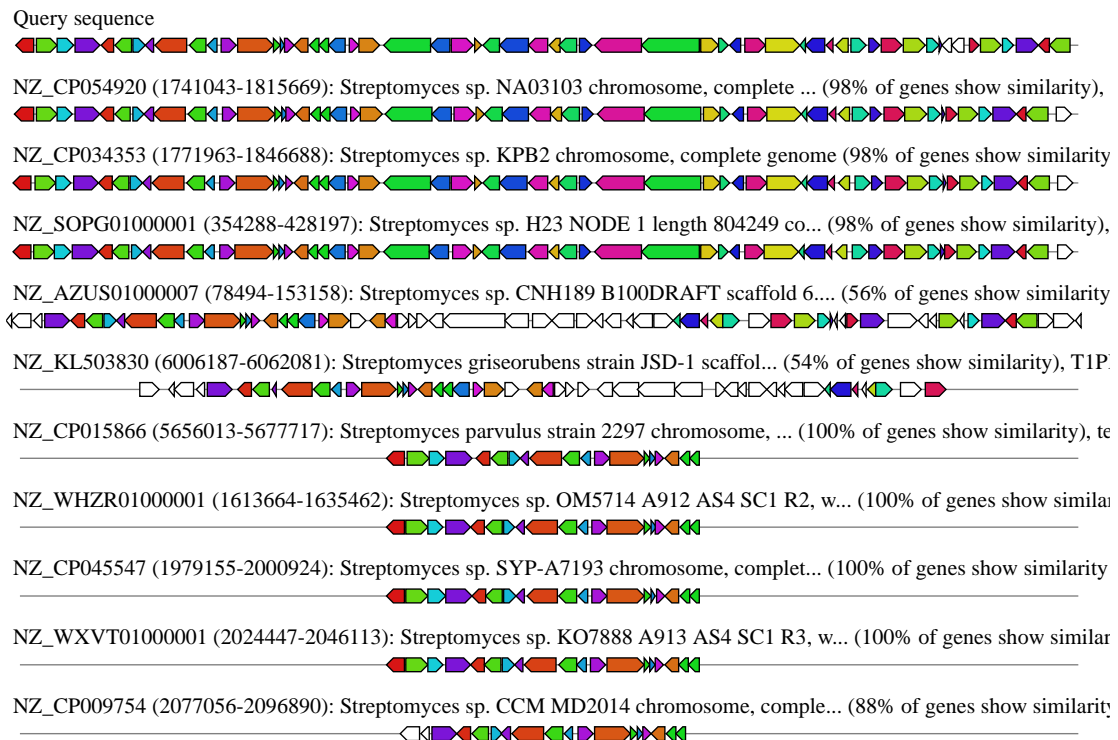
NZ_LT629768 (6965069-6978277): *Streptomyces* sp. 2114.2 chromosome I (72% of genes show similarity), siderophore



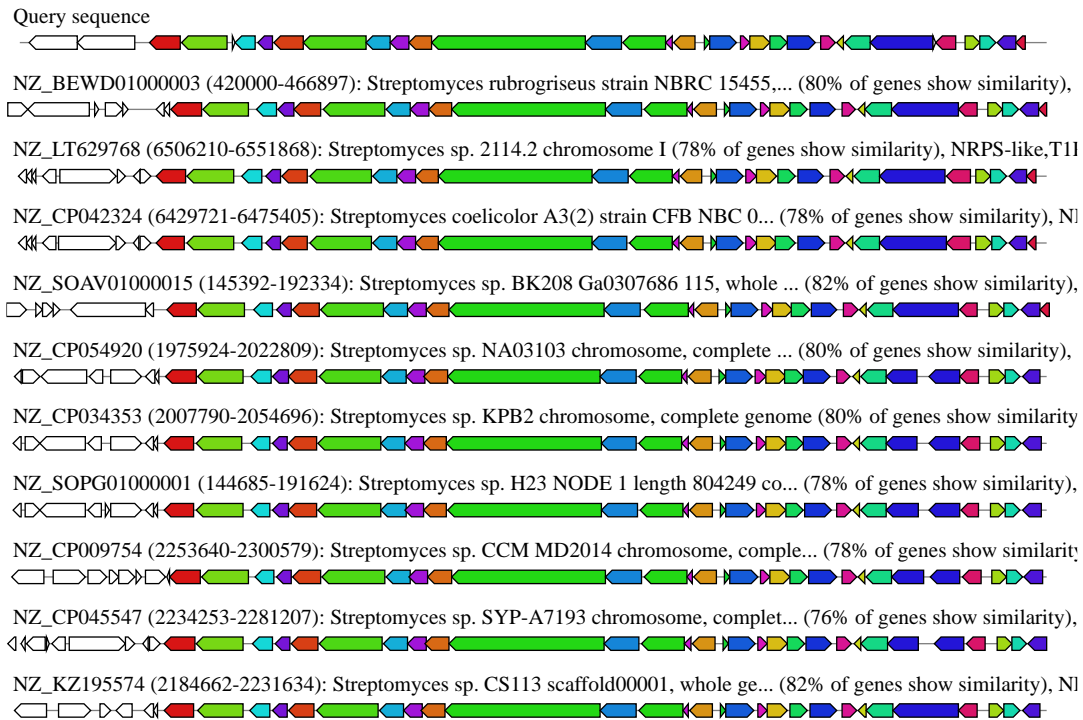
Cluster 8:



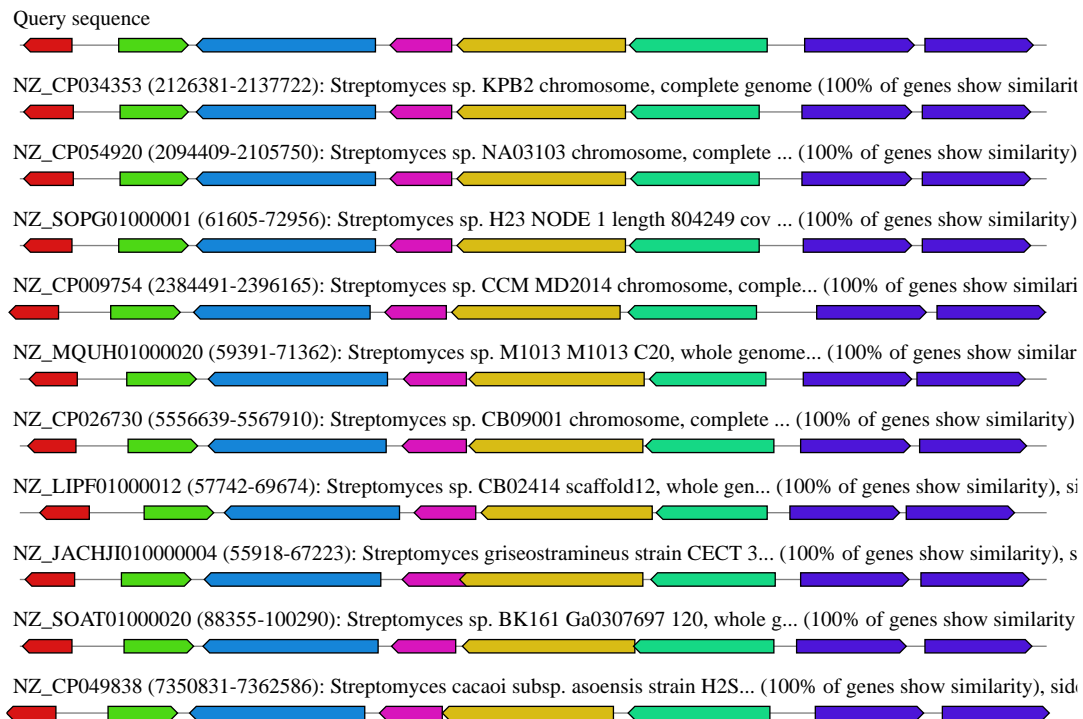
Cluster 9:



Cluster 10:

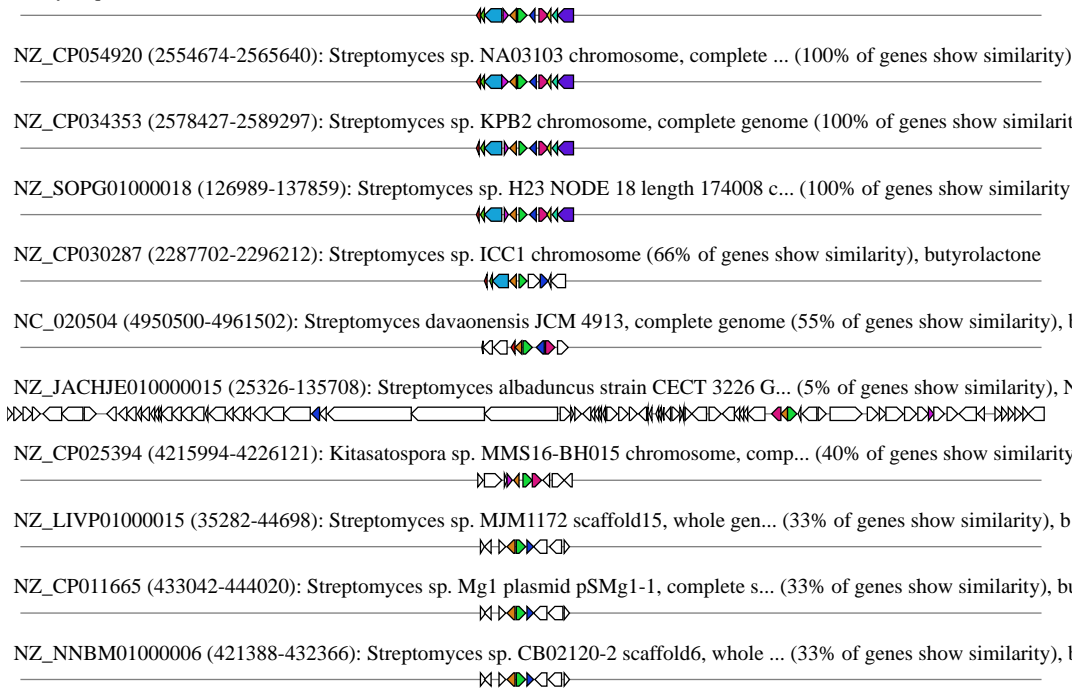


Cluster 11:



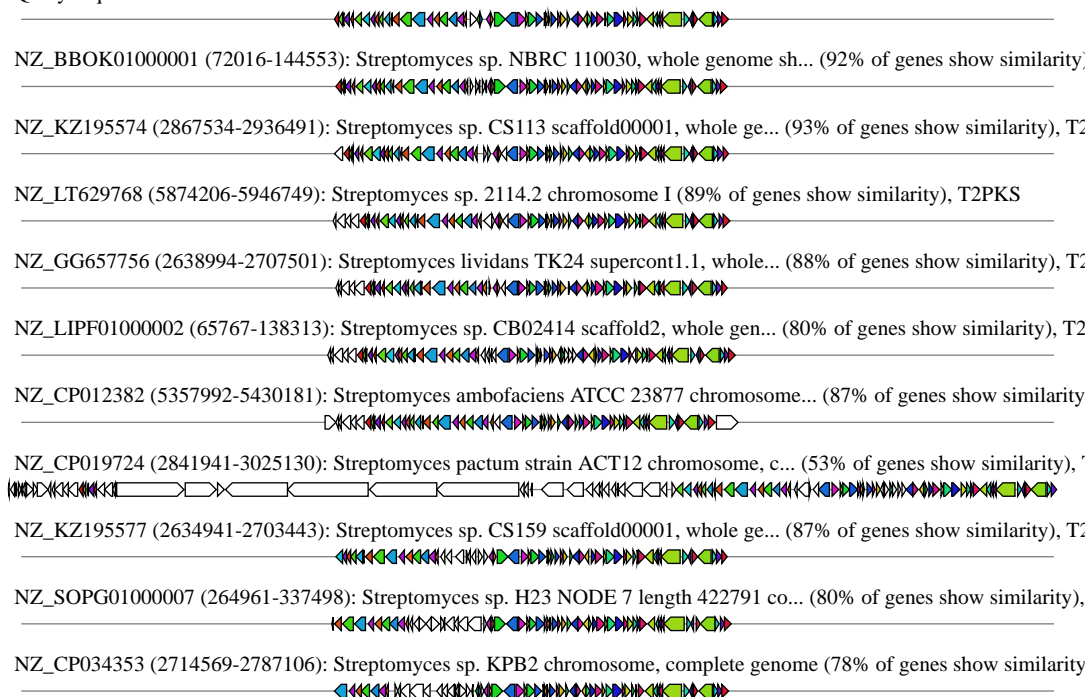
Cluster 12:

Query sequence

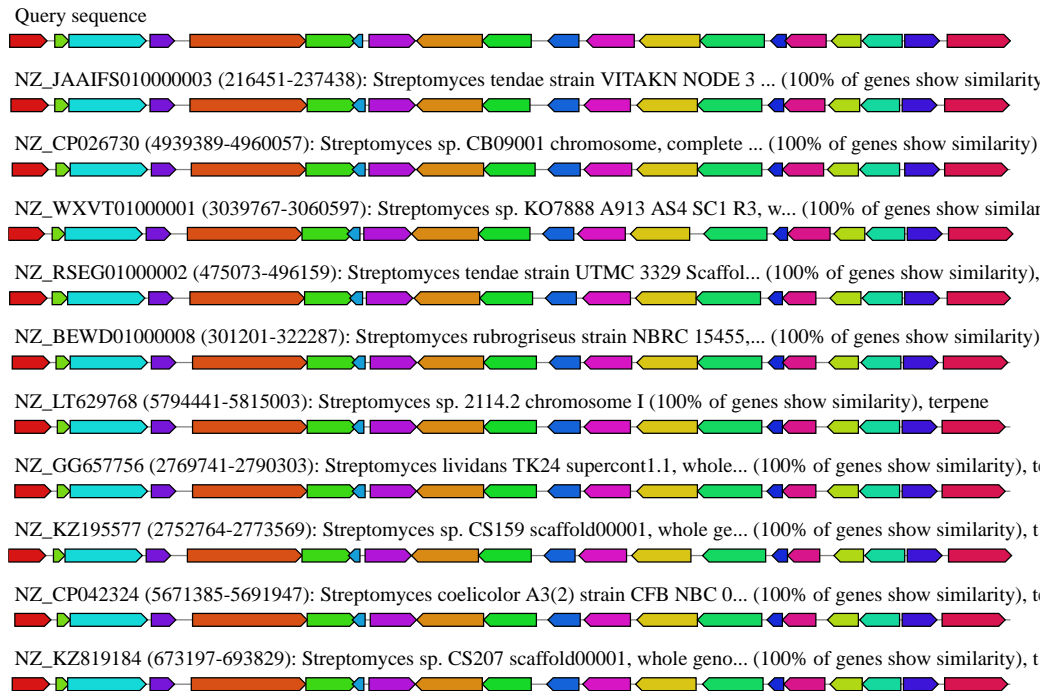


Cluster 13:

Query sequence



Cluster 14:

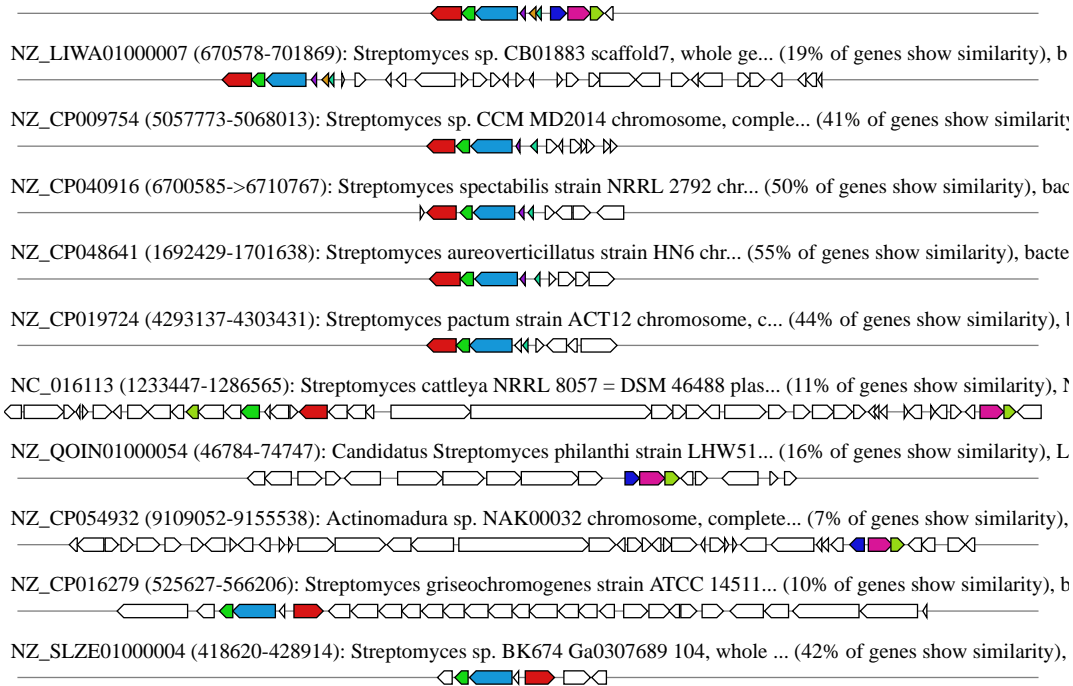


Cluster 15:



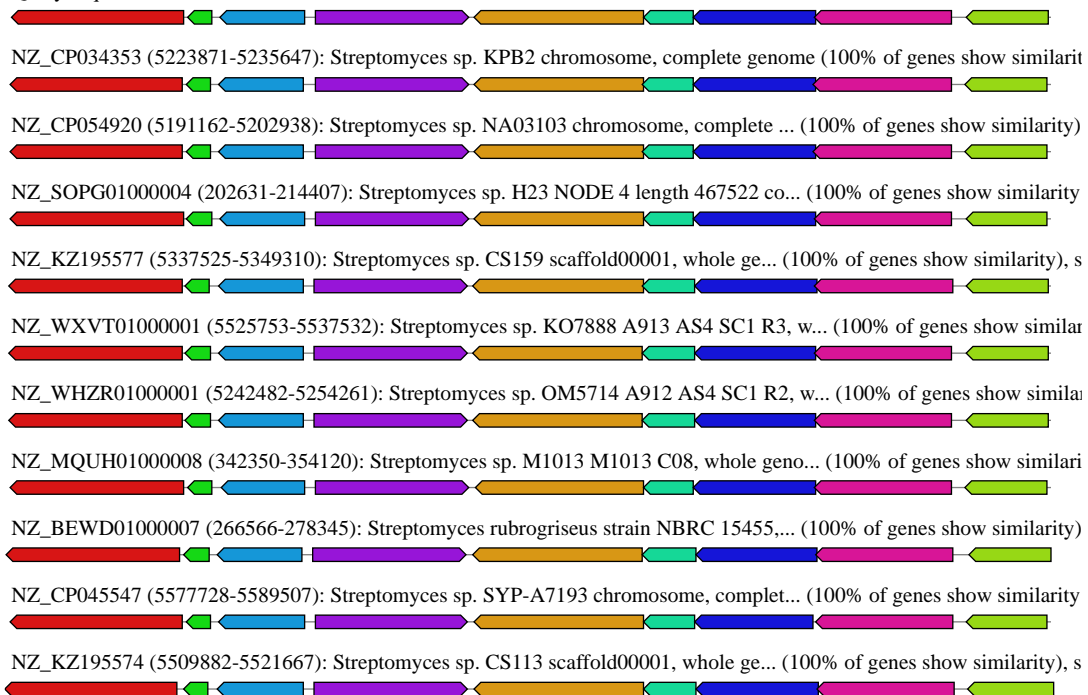
Cluster 16:

Query sequence

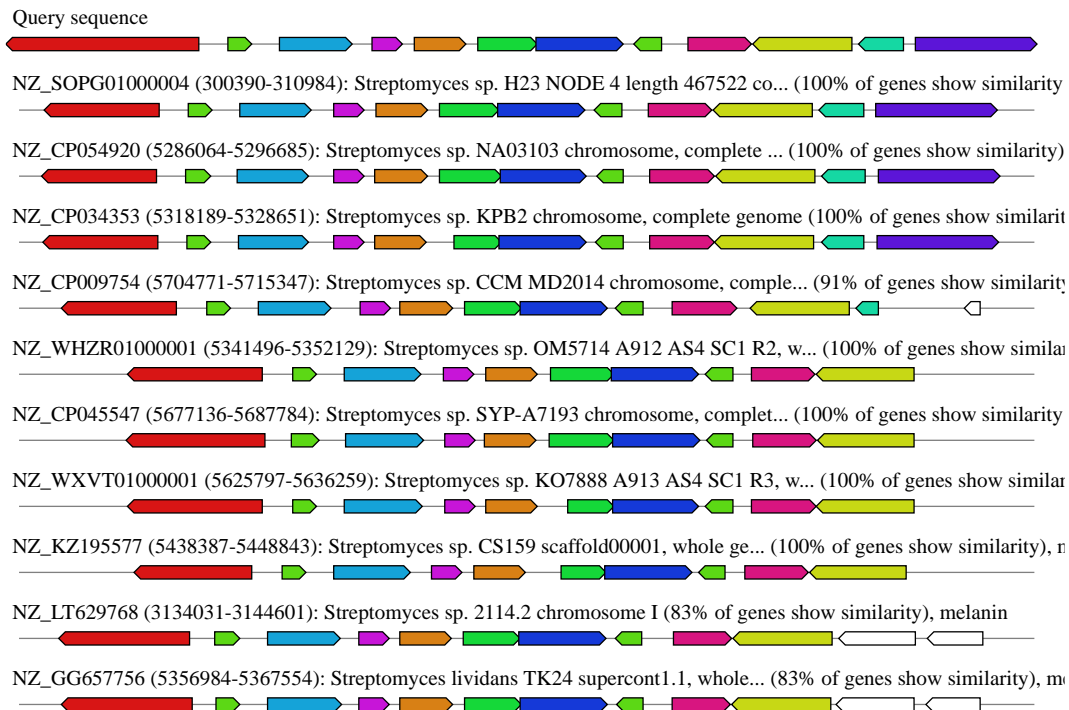


Cluster 17:

Query sequence



Cluster 18:



Cluster 19:



Cluster 20:

Query sequence



NZ_SOPG01000010 (169351-210476): Streptomyces sp. H23 NODE 10 length 355477 c... (100% of genes show similarity)



NZ_CP054920 (6972979-7012287): Streptomyces sp. NA03103 chromosome, complete ... (97% of genes show similarity),



NZ_WXVT01000001 (7239293-7278249): Streptomyces sp. KO7888 A913 AS4 SC1 R3, w... (100% of genes show similar



NZ_CP045547 (7315102-7354122): Streptomyces sp. SYP-A7193 chromosome, complet... (100% of genes show similarity)



NZ_CP034353 (6998860-7038149): Streptomyces sp. KPB2 chromosome, complete genome (95% of genes show similarity)



NZ_LIPF01000010 (220884-261976): Streptomyces sp. CB02414 scaffold10, whole g... (95% of genes show similarity), T3



NZ_WHZR01000001 (6998085-7037049): Streptomyces sp. OM5714 A912 AS4 SC1 R2, w... (100% of genes show similar



NZ_KZ195577 (7107108-7145938): Streptomyces sp. CS159 scaffold00001, whole ge... (97% of genes show similarity), T3



NZ_CP036534 (992278-1033391): Streptomyces sp. VN1 chromosome, complete genome (97% of genes show similarity), T3



NZ_CP016795 (899757-940870): Streptomyces olivaceus strain KLBMP 5084 chromos... (97% of genes show similarity), T3



Cluster 21:

Query sequence



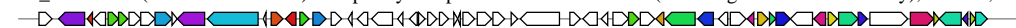
NZ_JAAIFS010000011 (23575-99666): Streptomyces tendae strain VITAKN NODE 11 l... (52% of genes show similarity),



NZ_CP054920 (7326366-7367545): Streptomyces sp. NA03103 chromosome, complete ... (67% of genes show similarity),



NZ_LT629768 (7903183-7975292): Streptomyces sp. 2114.2 chromosome I (48% of genes show similarity), T3PKS,other



NZ_CP042324 (7973583-8047517): Streptomyces coelicolor A3(2) strain CFB NBC 0... (47% of genes show similarity), T3



NZ_GG657756 (615395-688284): Streptomyces lividans TK24 supercont1.1, whole g... (46% of genes show similarity), T3



NZ_CP009754 (7725799-7766978): Streptomyces sp. CCM MD2014 chromosome, comple... (58% of genes show similarity)



NZ_BBOK01000004 (89675-128501): Streptomyces sp. NBRC 110030, whole genome sh... (60% of genes show similarity)



NZ_CP034353 (7359194-7400346): Streptomyces sp. KPB2 chromosome, complete genome (52% of genes show similarity)



NZ_CP026730 (6972282-7011554): Streptomyces sp. CB09001 chromosome, complete ... (45% of genes show similarity), T3



NZ_MQUH01000003 (102896-139645): Streptomyces sp. M1013 M1013 C03, whole geno... (47% of genes show similarity)



Cluster 22:

Query sequence



NZ_LIPF01000007 (539754-574642): *Streptomyces* sp. CB02414 scaffold7, whole ge... (86% of genes show similarity), ter



NZ_KZ819184 (3584225-3618334): *Streptomyces* sp. CS207 scaffold00001, whole ge... (83% of genes show similarity), ter



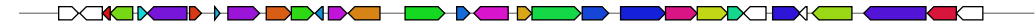
NZ_CP039123 (803279-837373): *Streptomyces* sp. SS52 chromosome, complete genome (83% of genes show similarity), t



NZ_CP027297 (879867-913753): *Streptomyces* sp. SGAir0924 chromosome, complete ... (81% of genes show similarity), t



NZ_CP012949 (764702-795248): *Streptomyces* ambofaciens strain DSM 40697 chromo... (83% of genes show similarity), t



NZ_CP012382 (784392-815058): *Streptomyces* ambofaciens ATCC 23877 chromosome, ... (83% of genes show similarity)



NZ_CP009754 (7904176-7928198): *Streptomyces* sp. CCM MD2014 chromosome, comple... (95% of genes show similarity)



NZ_CP042278 (7075905-7099325): *Streptomyces* sp. WAC06273 strain WAC6273 subst... (85% of genes show similarity),



NZ_BBOK01000016 (119565-143614): *Streptomyces* sp. NBRC 110030, whole genome s... (100% of genes show similarity)

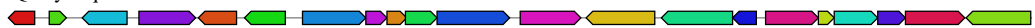


NZ_JAAIFS01000005 (57103-81152): *Streptomyces* tendae strain VITAKN NODE 5 le... (100% of genes show similarity)

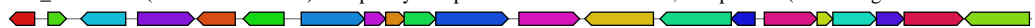


Cluster 23:

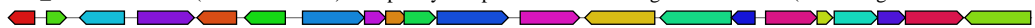
Query sequence



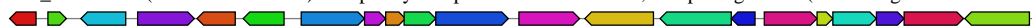
NZ_CP054920 (7568663-7589791): *Streptomyces* sp. NA03103 chromosome, complete ... (100% of genes show similarity)



NZ_SOPG01000009 (236439-257567): *Streptomyces* sp. H23 NODE 9 length 365348 co... (100% of genes show similarity)



NZ_CP034353 (7595305-7616433): *Streptomyces* sp. KPB2 chromosome, complete genome (100% of genes show similarity)



NZ_KZ195577 (7718024-7739152): *Streptomyces* sp. CS159 scaffold00001, whole ge... (100% of genes show similarity), i



NZ_CP026730 (7228996-7250124): *Streptomyces* sp. CB09001 chromosome, complete ... (95% of genes show similarity), i



NZ_CP009754 (7980947-8002075): *Streptomyces* sp. CCM MD2014 chromosome, comple... (95% of genes show similarity)



NZ_CP045547 (7911201-7932329): *Streptomyces* sp. SYP-A7193 chromosome, complet... (90% of genes show similarity),



NZ_WHZR01000001 (7652565-7673693): *Streptomyces* sp. OM5714 A912 AS4 SC1 R2, w... (95% of genes show similarity)



NZ_WXVT01000001 (7849109-7870237): *Streptomyces* sp. KO7888 A913 AS4 SC1 R3, w... (95% of genes show similarity)



NZ_LT629768 (8197386-8218514): *Streptomyces* sp. 2114.2 chromosome I (90% of genes show similarity), indole

