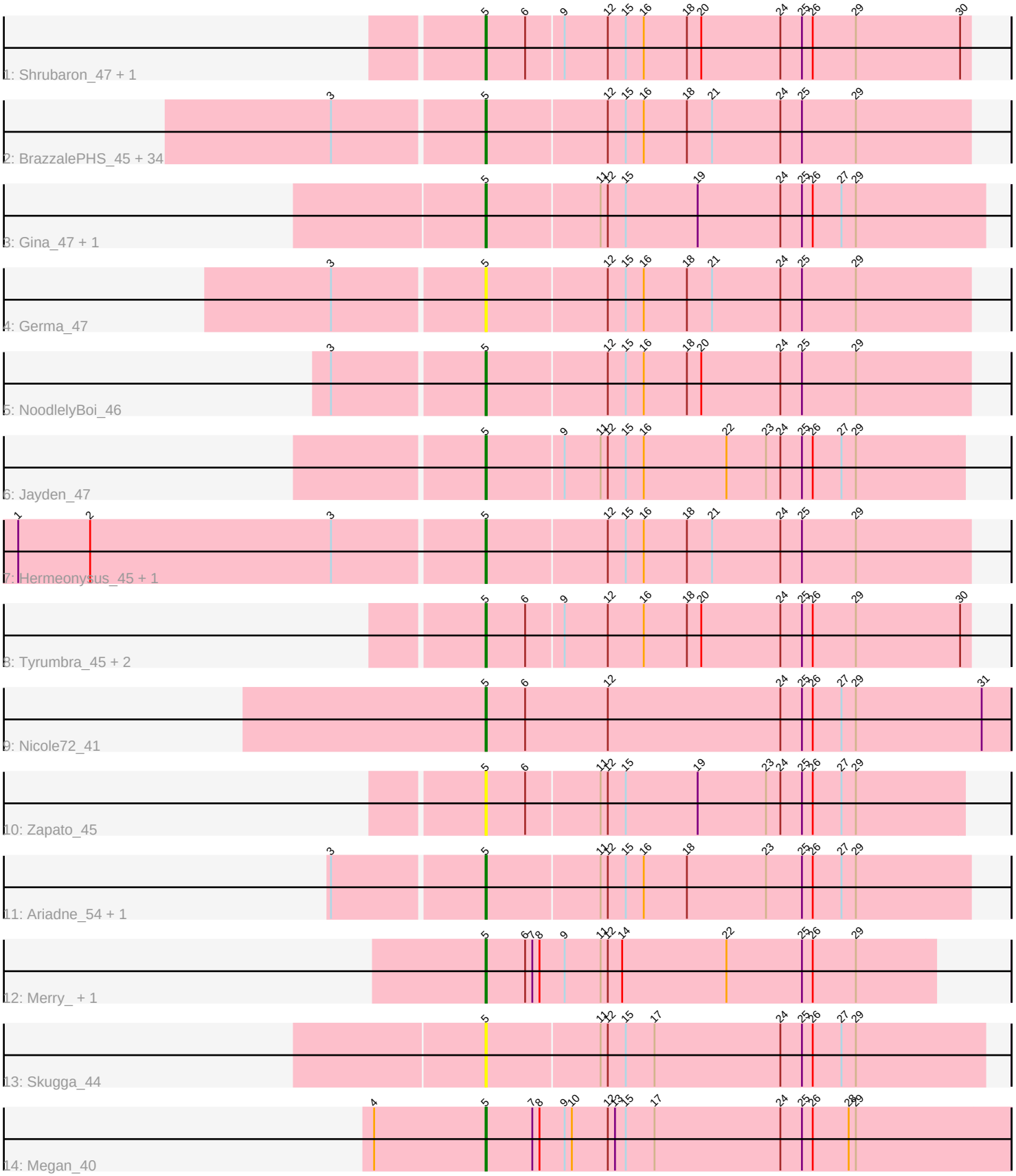
Pham 347679


1: Shrubaron_47 + 1
2: BrazzalePHS_45 + 34
3: Gina_47 + 1
4: Germa_47
5: NoodlelyBoi_46
6: Jayden_47
7: Hermeonysus_45 + 1
8: Tyrumbra_45 + 2
9: Nicole72_41
10: Zapato_45
11: Ariadne_54 + 1
12: Merry_ + 1
13: Skugga_44
14: Megan_40

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 347679 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347679 has 55 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Shrubaron_47, Metamorphoo_47
• Track 2 : BrazzalePHS_45, EarickHC_46, PhedwardCullen_45, Kowalski_45, CrazyRich_45, Paschalis_45, Busephilis_45, PierreOrion_46, Savannah_45, Jefe_46, Crisis_47, Ganandorf_45, Phorgeous_45, Scumberland_47, Selwyn23_47, KaiHaiDragon_46, Quhwah_49, ClearAsMud_48, Onika_45, Yeti_46, BeagleBug_45, Lucretia_46, Jollipop_46, Ramiel05_45, Piperis_46, Rockwell_45, Cranjis_47, SirFrank_45, Glorp_47, LittleFortune_47, Phrancesco_46, Antares_46, Honeyfin_47, Shotgun_45, PiperSansNom_46
• Track 3 : Gina_47, Teamocil_47
• Track 4 : Germa_47
• Track 5 : NoodlelyBoi_46
• Track 6 : Jayden_47
• Track 7 : Hermeonysus_45, Pulchra_47
• Track 8 : Tyrumbra_45, RobsFeet_48, Fireman_47
• Track 9 : Nicole72_41
• Track 10 : Zapato_45
• Track 11 : Ariadne_54, Smarties_54
• Track 12 : Merry_, Sunny_
• Track 13 : Skugga_44
• Track 14 : Megan_40

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 5, it was called in 49 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Antares_46, Ariadne_54, BeagleBug_45, BrazzalePHS_45, Busephilis_45, ClearAsMud_48, Cranjis_47, CrazyRich_45, Crisis_47, EarickHC_46, Fireman_47, Ganandorf_45, Germa_47, Gina_47, Glorp_47, Hermeonysus_45, Honeyfin_47, Jayden_47, Jefe_46, Jollipop_46, KaiHaiDragon_46, Kowalski_45, LittleFortune_47, Lucretia_46, Megan_40, Merry_, Metamorphoo_47, Nicole72_41, NoodlelyBoi_46, Onika_45, Paschalis_45, PhedwardCullen_45, Phorgeous_45, Phrancesco_46, PierreOrion_46, PiperSansNom_46, Piperis_46, Pulchra_47, Quhwah_49,

Ramiel05_45, RobsFeet_48, Rockwell_45, Savannah_45, Scumberland_47, Selwyn23_47, Shotgun_45, Shrubaron_47, SirFrank_45, Skugga_44, Smarties_54, Sunny_, Teamocil_47, Tyrumbra_45, Yeti_46, Zapato_45,

Genes that have the "Most Annotated" start but do not call it:
•

Genes that do not have the "Most Annotated" start:
•

Summary by start number:

Start 5:
• Found in 55 of 55 (100.0%) of genes in pham
• Manual Annotations of this start: 49 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antares_46 (EC), Ariadne_54 (EC), BeagleBug_45 (EC), BrazzalePHS_45 (EC), Busephilis_45 (EC), ClearAsMud_48 (EC), Cranjis_47 (EC), CrazyRich_45 (EC), Crisis_47 (EC), EarickHC_46 (EC), Fireman_47 (EC), Ganandorf_45 (EC), Germa_47 (EC), Gina_47 (EC), Glorp_47 (EC), Hermeonysus_45 (EC), Honeyfin_47 (EC), Jayden_47 (EC), Jefe_46 (EC), Jollipop_46 (EC), KaiHaiDragon_46 (EC), Kowalski_45 (EC), LittleFortune_47 (EC), Lucretia_46 (EC), Megan_40 (EC), Merry_ (EC), Metamorphoo_47 (EC), Nicole72_41 (EC), NoodlelyBoi_46 (EC), Onika_45 (EC), Paschalis_45 (EC), PhedwardCullen_45 (EC), Phorgeous_45 (EC), Phrancesco_46 (EC), PierreOrion_46 (EC), PiperSansNom_46 (EC), Piperis_46 (EC), Pulchra_47 (EC), Quhwah_49 (EC), Ramiel05_45 (EC), RobsFeet_48 (EC), Rockwell_45 (EC), Savannah_45 (EC), Scumberland_47 (EC), Selwyn23_47 (EC), Shotgun_45 (EC), Shrubaron_47 (EC), SirFrank_45 (EC), Skugga_44 (EC), Smarties_54 (EC), Sunny_ (EC), Teamocil_47 (EC), Tyrumbra_45 (EC), Yeti_46 (EC), Zapato_45 (EC),

Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:
•Start number 5 was manually annotated 49 times for cluster EC.

Gene Information:

Gene: Antares_46 Start: 32014, Stop: 32415, Start Num: 5
Candidate Starts for Antares_46:
(3, 31891), (Start: 5 @32014 has 49 MA's), (12, 32113), (15, 32128), (16, 32143), (18, 32179), (21, 32200), (24, 32257), (25, 32275), (29, 32320),

Gene: Ariadne_54 Start: 33634, Stop: 34035, Start Num: 5
Candidate Starts for Ariadne_54:
(3, 33511), (Start: 5 @33634 has 49 MA's), (11, 33727), (12, 33733), (15, 33748), (16, 33763), (18, 33799), (23, 33865), (25, 33895), (26, 33904), (27, 33928), (29, 33940),

Gene: BeagleBug_45 Start: 31795, Stop: 32196, Start Num: 5

Candidate Starts for BeagleBug_45:
(3, 31672), (Start: 5 @31795 has 49 MA's), (12, 31894), (15, 31909), (16, 31924), (18, 31960), (21, 31981), (24, 32038), (25, 32056), (29, 32101),

Gene: BrazzalePHS_45 Start: 31809, Stop: 32210, Start Num: 5
Candidate Starts for BrazzalePHS_45:
(3, 31686), (Start: 5 @31809 has 49 MA's), (12, 31908), (15, 31923), (16, 31938), (18, 31974), (21, 31995), (24, 32052), (25, 32070), (29, 32115),

Gene: Busephilis_45 Start: 31750, Stop: 32151, Start Num: 5
Candidate Starts for Busephilis_45:
(3, 31627), (Start: 5 @31750 has 49 MA's), (12, 31849), (15, 31864), (16, 31879), (18, 31915), (21, 31936), (24, 31993), (25, 32011), (29, 32056),

Gene: ClearAsMud_48 Start: 31890, Stop: 32291, Start Num: 5
Candidate Starts for ClearAsMud_48:
(3, 31767), (Start: 5 @31890 has 49 MA's), (12, 31989), (15, 32004), (16, 32019), (18, 32055), (21, 32076), (24, 32133), (25, 32151), (29, 32196),

Gene: Cranjis_47 Start: 31969, Stop: 32370, Start Num: 5
Candidate Starts for Cranjis_47:
(3, 31846), (Start: 5 @31969 has 49 MA's), (12, 32068), (15, 32083), (16, 32098), (18, 32134), (21, 32155), (24, 32212), (25, 32230), (29, 32275),

Gene: CrazyRich_45 Start: 31778, Stop: 32179, Start Num: 5
Candidate Starts for CrazyRich_45:
(3, 31655), (Start: 5 @31778 has 49 MA's), (12, 31877), (15, 31892), (16, 31907), (18, 31943), (21, 31964), (24, 32021), (25, 32039), (29, 32084),

Gene: Crisis_47 Start: 31769, Stop: 32170, Start Num: 5
Candidate Starts for Crisis_47:
(3, 31646), (Start: 5 @31769 has 49 MA's), (12, 31868), (15, 31883), (16, 31898), (18, 31934), (21, 31955), (24, 32012), (25, 32030), (29, 32075),

Gene: EarickHC_46 Start: 31692, Stop: 32093, Start Num: 5
Candidate Starts for EarickHC_46:
(3, 31569), (Start: 5 @31692 has 49 MA's), (12, 31791), (15, 31806), (16, 31821), (18, 31857), (21, 31878), (24, 31935), (25, 31953), (29, 31998),

Gene: Fireman_47 Start: 33300, Stop: 33701, Start Num: 5
Candidate Starts for Fireman_47:
(Start: 5 @33300 has 49 MA's), (6, 33333), (9, 33363), (12, 33399), (16, 33429), (18, 33465), (20, 33477), (24, 33543), (25, 33561), (26, 33570), (29, 33606), (30, 33693),

Gene: Ganandorf_45 Start: 31831, Stop: 32232, Start Num: 5
Candidate Starts for Ganandorf_45:
(3, 31708), (Start: 5 @31831 has 49 MA's), (12, 31930), (15, 31945), (16, 31960), (18, 31996), (21, 32017), (24, 32074), (25, 32092), (29, 32137),

Gene: Germa_47 Start: 31660, Stop: 32061, Start Num: 5
Candidate Starts for Germa_47:
(3, 31537), (Start: 5 @31660 has 49 MA's), (12, 31759), (15, 31774), (16, 31789), (18, 31825), (21, 31846), (24, 31903), (25, 31921), (29, 31966),

Gene: Gina_47 Start: 31433, Stop: 31846, Start Num: 5
Candidate Starts for Gina_47:
(Start: 5 @31433 has 49 MA's), (11, 31526), (12, 31532), (15, 31547), (19, 31607), (24, 31676), (25, 31694), (26, 31703), (27, 31727), (29, 31739),

Gene: Glorp_47 Start: 31832, Stop: 32233, Start Num: 5
Candidate Starts for Glorp_47:
(3, 31709), (Start: 5 @31832 has 49 MA's), (12, 31931), (15, 31946), (16, 31961), (18, 31997), (21, 32018), (24, 32075), (25, 32093), (29, 32138),

Gene: Hermeonysus_45 Start: 31698, Stop: 32099, Start Num: 5
Candidate Starts for Hermeonysus_45:
(1, 31314), (2, 31374), (3, 31575), (Start: 5 @31698 has 49 MA's), (12, 31797), (15, 31812), (16, 31827), (18, 31863), (21, 31884), (24, 31941), (25, 31959), (29, 32004),

Gene: Honeyfin_47 Start: 32019, Stop: 32420, Start Num: 5
Candidate Starts for Honeyfin_47:
(3, 31896), (Start: 5 @32019 has 49 MA's), (12, 32118), (15, 32133), (16, 32148), (18, 32184), (21, 32205), (24, 32262), (25, 32280), (29, 32325),

Gene: Jayden_47 Start: 32140, Stop: 32535, Start Num: 5
Candidate Starts for Jayden_47:
(Start: 5 @32140 has 49 MA's), (9, 32203), (11, 32233), (12, 32239), (15, 32254), (16, 32269), (22, 32338), (23, 32371), (24, 32383), (25, 32401), (26, 32410), (27, 32434), (29, 32446),

Gene: Jefe_46 Start: 31756, Stop: 32157, Start Num: 5
Candidate Starts for Jefe_46:
(3, 31633), (Start: 5 @31756 has 49 MA's), (12, 31855), (15, 31870), (16, 31885), (18, 31921), (21, 31942), (24, 31999), (25, 32017), (29, 32062),

Gene: Jollipop_46 Start: 32095, Stop: 32496, Start Num: 5
Candidate Starts for Jollipop_46:
(3, 31972), (Start: 5 @32095 has 49 MA's), (12, 32194), (15, 32209), (16, 32224), (18, 32260), (21, 32281), (24, 32338), (25, 32356), (29, 32401),

Gene: KaiHaiDragon_46 Start: 31692, Stop: 32093, Start Num: 5
Candidate Starts for KaiHaiDragon_46:
(3, 31569), (Start: 5 @31692 has 49 MA's), (12, 31791), (15, 31806), (16, 31821), (18, 31857), (21, 31878), (24, 31935), (25, 31953), (29, 31998),

Gene: Kowalski_45 Start: 31805, Stop: 32206, Start Num: 5
Candidate Starts for Kowalski_45:
(3, 31682), (Start: 5 @31805 has 49 MA's), (12, 31904), (15, 31919), (16, 31934), (18, 31970), (21, 31991), (24, 32048), (25, 32066), (29, 32111),

Gene: LittleFortune_47 Start: 32061, Stop: 32462, Start Num: 5
Candidate Starts for LittleFortune_47:
(3, 31938), (Start: 5 @32061 has 49 MA's), (12, 32160), (15, 32175), (16, 32190), (18, 32226), (21, 32247), (24, 32304), (25, 32322), (29, 32367),

Gene: Lucretia_46 Start: 31748, Stop: 32149, Start Num: 5
Candidate Starts for Lucretia_46:

(3, 31625), (Start: 5 @31748 has 49 MA's), (12, 31847), (15, 31862), (16, 31877), (18, 31913), (21, 31934), (24, 31991), (25, 32009), (29, 32054),

Gene: Megan_40 Start: 32577, Stop: 33014, Start Num: 5
Candidate Starts for Megan_40:
(4, 32484), (Start: 5 @32577 has 49 MA's), (7, 32616), (8, 32622), (9, 32643), (10, 32649), (12, 32679), (13, 32685), (15, 32694), (17, 32718), (24, 32823), (25, 32841), (26, 32850), (28, 32880), (29, 32886),

Gene: Merry_ Start: 33347, Stop: 33721, Start Num: 5
Candidate Starts for Merry_:
(Start: 5 @33347 has 49 MA's), (6, 33380), (7, 33386), (8, 33392), (9, 33413), (11, 33443), (12, 33449), (14, 33461), (22, 33548), (25, 33611), (26, 33620), (29, 33656),

Gene: Metamorphoo_47 Start: 32562, Stop: 32963, Start Num: 5
Candidate Starts for Metamorphoo_47:
(Start: 5 @32562 has 49 MA's), (6, 32595), (9, 32625), (12, 32661), (15, 32676), (16, 32691), (18, 32727), (20, 32739), (24, 32805), (25, 32823), (26, 32832), (29, 32868), (30, 32955),

Gene: Nicole72_41 Start: 33423, Stop: 33860, Start Num: 5
Candidate Starts for Nicole72_41:
(Start: 5 @33423 has 49 MA's), (6, 33456), (12, 33525), (24, 33669), (25, 33687), (26, 33696), (27, 33720), (29, 33732), (31, 33837),

Gene: NoodlelyBoi_46 Start: 32103, Stop: 32504, Start Num: 5
Candidate Starts for NoodlelyBoi_46:
(3, 31980), (Start: 5 @32103 has 49 MA's), (12, 32202), (15, 32217), (16, 32232), (18, 32268), (20, 32280), (24, 32346), (25, 32364), (29, 32409),

Gene: Onika_45 Start: 31780, Stop: 32181, Start Num: 5
Candidate Starts for Onika_45:
(3, 31657), (Start: 5 @31780 has 49 MA's), (12, 31879), (15, 31894), (16, 31909), (18, 31945), (21, 31966), (24, 32023), (25, 32041), (29, 32086),

Gene: Paschalis_45 Start: 31787, Stop: 32188, Start Num: 5
Candidate Starts for Paschalis_45:
(3, 31664), (Start: 5 @31787 has 49 MA's), (12, 31886), (15, 31901), (16, 31916), (18, 31952), (21, 31973), (24, 32030), (25, 32048), (29, 32093),

Gene: PhedwardCullen_45 Start: 31538, Stop: 31939, Start Num: 5
Candidate Starts for PhedwardCullen_45:
(3, 31415), (Start: 5 @31538 has 49 MA's), (12, 31637), (15, 31652), (16, 31667), (18, 31703), (21, 31724), (24, 31781), (25, 31799), (29, 31844),

Gene: Phorgeous_45 Start: 31650, Stop: 32051, Start Num: 5
Candidate Starts for Phorgeous_45:
(3, 31527), (Start: 5 @31650 has 49 MA's), (12, 31749), (15, 31764), (16, 31779), (18, 31815), (21, 31836), (24, 31893), (25, 31911), (29, 31956),

Gene: Phrancesco_46 Start: 31940, Stop: 32341, Start Num: 5
Candidate Starts for Phrancesco_46:
(3, 31817), (Start: 5 @31940 has 49 MA's), (12, 32039), (15, 32054), (16, 32069), (18, 32105), (21, 32126), (24, 32183), (25, 32201), (29, 32246),

Gene: PierreOrion_46 Start: 31954, Stop: 32355, Start Num: 5
Candidate Starts for PierreOrion_46:
(3, 31831), (Start: 5 @31954 has 49 MA's), (12, 32053), (15, 32068), (16, 32083), (18, 32119), (21, 32140), (24, 32197), (25, 32215), (29, 32260),

Gene: PiperSansNom_46 Start: 32094, Stop: 32495, Start Num: 5
Candidate Starts for PiperSansNom_46:
(3, 31971), (Start: 5 @32094 has 49 MA's), (12, 32193), (15, 32208), (16, 32223), (18, 32259), (21, 32280), (24, 32337), (25, 32355), (29, 32400),

Gene: Piperis_46 Start: 31773, Stop: 32174, Start Num: 5
Candidate Starts for Piperis_46:
(3, 31650), (Start: 5 @31773 has 49 MA's), (12, 31872), (15, 31887), (16, 31902), (18, 31938), (21, 31959), (24, 32016), (25, 32034), (29, 32079),

Gene: Pulchra_47 Start: 32170, Stop: 32571, Start Num: 5
Candidate Starts for Pulchra_47:
(1, 31786), (2, 31846), (3, 32047), (Start: 5 @32170 has 49 MA's), (12, 32269), (15, 32284), (16, 32299), (18, 32335), (21, 32356), (24, 32413), (25, 32431), (29, 32476),

Gene: Quhwah_49 Start: 32402, Stop: 32803, Start Num: 5
Candidate Starts for Quhwah_49:
(3, 32279), (Start: 5 @32402 has 49 MA's), (12, 32501), (15, 32516), (16, 32531), (18, 32567), (21, 32588), (24, 32645), (25, 32663), (29, 32708),

Gene: Ramiel05_45 Start: 31805, Stop: 32206, Start Num: 5
Candidate Starts for Ramiel05_45:
(3, 31682), (Start: 5 @31805 has 49 MA's), (12, 31904), (15, 31919), (16, 31934), (18, 31970), (21, 31991), (24, 32048), (25, 32066), (29, 32111),

Gene: RobsFeet_48 Start: 32843, Stop: 33244, Start Num: 5
Candidate Starts for RobsFeet_48:
(Start: 5 @32843 has 49 MA's), (6, 32876), (9, 32906), (12, 32942), (16, 32972), (18, 33008), (20, 33020), (24, 33086), (25, 33104), (26, 33113), (29, 33149), (30, 33236),

Gene: Rockwell_45 Start: 31805, Stop: 32206, Start Num: 5
Candidate Starts for Rockwell_45:
(3, 31682), (Start: 5 @31805 has 49 MA's), (12, 31904), (15, 31919), (16, 31934), (18, 31970), (21, 31991), (24, 32048), (25, 32066), (29, 32111),

Gene: Savannah_45 Start: 31832, Stop: 32233, Start Num: 5
Candidate Starts for Savannah_45:
(3, 31709), (Start: 5 @31832 has 49 MA's), (12, 31931), (15, 31946), (16, 31961), (18, 31997), (21, 32018), (24, 32075), (25, 32093), (29, 32138),

Gene: Scumberland_47 Start: 32027, Stop: 32428, Start Num: 5
Candidate Starts for Scumberland_47:
(3, 31904), (Start: 5 @32027 has 49 MA's), (12, 32126), (15, 32141), (16, 32156), (18, 32192), (21, 32213), (24, 32270), (25, 32288), (29, 32333),

Gene: Selwyn23_47 Start: 32004, Stop: 32405, Start Num: 5
Candidate Starts for Selwyn23_47:

(3, 31881), (Start: 5 @32004 has 49 MA's), (12, 32103), (15, 32118), (16, 32133), (18, 32169), (21, 32190), (24, 32247), (25, 32265), (29, 32310),

Gene: Shotgun_45 Start: 31631, Stop: 32032, Start Num: 5
Candidate Starts for Shotgun_45:
(3, 31508), (Start: 5 @31631 has 49 MA's), (12, 31730), (15, 31745), (16, 31760), (18, 31796), (21, 31817), (24, 31874), (25, 31892), (29, 31937),

Gene: Shrubaron_47 Start: 32477, Stop: 32878, Start Num: 5
Candidate Starts for Shrubaron_47:
(Start: 5 @32477 has 49 MA's), (6, 32510), (9, 32540), (12, 32576), (15, 32591), (16, 32606), (18, 32642), (20, 32654), (24, 32720), (25, 32738), (26, 32747), (29, 32783), (30, 32870),

Gene: SirFrank_45 Start: 31673, Stop: 32074, Start Num: 5
Candidate Starts for SirFrank_45:
(3, 31550), (Start: 5 @31673 has 49 MA's), (12, 31772), (15, 31787), (16, 31802), (18, 31838), (21, 31859), (24, 31916), (25, 31934), (29, 31979),

Gene: Skugga_44 Start: 31449, Stop: 31862, Start Num: 5
Candidate Starts for Skugga_44:
(Start: 5 @31449 has 49 MA's), (11, 31542), (12, 31548), (15, 31563), (17, 31587), (24, 31692), (25, 31710), (26, 31719), (27, 31743), (29, 31755),

Gene: Smarties_54 Start: 33634, Stop: 34035, Start Num: 5
Candidate Starts for Smarties_54:
(3, 33511), (Start: 5 @33634 has 49 MA's), (11, 33727), (12, 33733), (15, 33748), (16, 33763), (18, 33799), (23, 33865), (25, 33895), (26, 33904), (27, 33928), (29, 33940),

Gene: Sunny_ Start: 33349, Stop: 33723, Start Num: 5
Candidate Starts for Sunny_:
(Start: 5 @33349 has 49 MA's), (6, 33382), (7, 33388), (8, 33394), (9, 33415), (11, 33445), (12, 33451), (14, 33463), (22, 33550), (25, 33613), (26, 33622), (29, 33658),

Gene: Teamocil_47 Start: 31532, Stop: 31945, Start Num: 5
Candidate Starts for Teamocil_47:
(Start: 5 @31532 has 49 MA's), (11, 31625), (12, 31631), (15, 31646), (19, 31706), (24, 31775), (25, 31793), (26, 31802), (27, 31826), (29, 31838),

Gene: Tyrumbra_45 Start: 32643, Stop: 33044, Start Num: 5
Candidate Starts for Tyrumbra_45:
(Start: 5 @32643 has 49 MA's), (6, 32676), (9, 32706), (12, 32742), (16, 32772), (18, 32808), (20, 32820), (24, 32886), (25, 32904), (26, 32913), (29, 32949), (30, 33036),

Gene: Yeti_46 Start: 31806, Stop: 32207, Start Num: 5
Candidate Starts for Yeti_46:
(3, 31683), (Start: 5 @31806 has 49 MA's), (12, 31905), (15, 31920), (16, 31935), (18, 31971), (21, 31992), (24, 32049), (25, 32067), (29, 32112),

Gene: Zapato_45 Start: 31952, Stop: 32347, Start Num: 5
Candidate Starts for Zapato_45:
(Start: 5 @31952 has 49 MA's), (6, 31985), (11, 32045), (12, 32051), (15, 32066), (19, 32126), (23, 32183), (24, 32195), (25, 32213), (26, 32222), (27, 32246), (29, 32258),