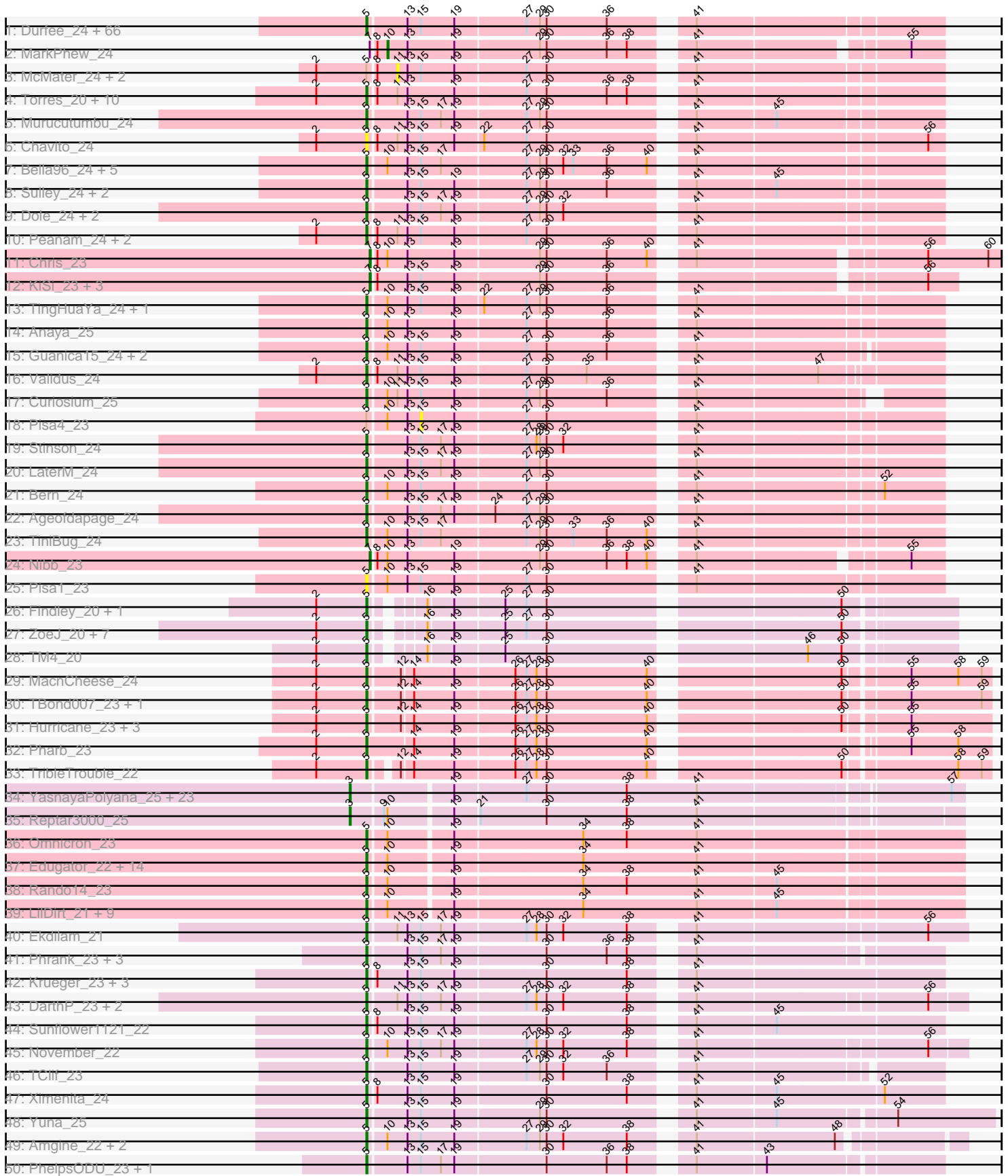
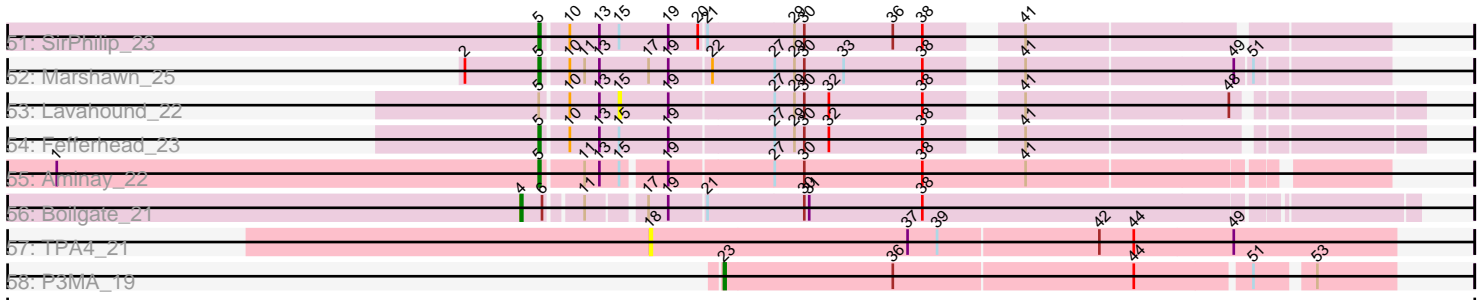


Pham 294416



Pham 294416



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 294416 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294416 has 222 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Durfee_24, Piatt_24, BaghaKamala_24, Boiii_24, Slimphazie_24, CrimD_24, Joy99_24, YoureAdopted_23, Belladonna_24, LindNT_24, Prithvi_24, Inky_24, CheetoDust_24, Apocalypse_24, Peel_24, Blizzard_24, Adonis_24, BarrelRoll_24, Zavala_24, Jayhawk_24, HedwigODU_24, Topper_24, Dalmuri_24, Mynx_24, JAWS_24, TreyKay_24, Asayake_24, BGIluviae_24, Jeckyll_24, Capricorn_24, Atiba_24, Geraldini_24, CREW_24, Ganymede_25, Beezoo_24, MeaningOfLife_24, ActinUp_24, CallaLilly_24, Padfoot_24, Veliki_24, Tachez_24, TaiwanKao_25, Padpat_24, Twitch_24, Rosmarinus_24, Emerson_24, CaseJules_24, Ramen_24, Hyperbowlee_24, Rapunzel97_24, BEEST_24, Zabiza_24, Tiri_24, Pokerus_23, AlishaPH_24, Adephagia_24, Jarvi_24, Homura_24, MacKat_24, TruffulaTree_24, Clipper_24, Spock_24, QuincyRose_23, ShiaSurprise_24, Megsy_24, Lunahalos_24, Llorens_24
- Track 2 : MarkPhew_24
- Track 3 : McMater_24, Dartin_24, Richo_24
- Track 4 : Torres_20, Trice_20, Mdavu_20, Enkosi_20, Biglebops_20, Teejan_20, Amelie_20, Nikao_20, Nutello_20, SgtBeansprout_20, LilPharaoh_20
- Track 5 : Murucutumbu_24
- Track 6 : Chavito_24
- Track 7 : Bella96_24, Anma_24, DartGoblin_24, DrHayes_24, Urkel_24, SamuelLPlaqson_24
- Track 8 : Sulley_24, Angelica_24, Deby_24
- Track 9 : Dole_24, Illumine_24, Devera_24
- Track 10 : Peanam_24, Shaobing_24, Niklas_24
- Track 11 : Chris_23
- Track 12 : KiSi_23, Oscar_23, LeMond_23, Scarlett_23
- Track 13 : TingHuaYa_24, LastHope_24
- Track 14 : Anaya_25
- Track 15 : Guanica15_24, Yunkel11_24, Efra2_24
- Track 16 : Validus_24
- Track 17 : Curiosium_25
- Track 18 : Pisa4_23
- Track 19 : Stinson_24
- Track 20 : LaterM_24
- Track 21 : Bern_24
- Track 22 : Ageofdapage_24
- Track 23 : TiniBug_24
- Track 24 : Nibb_23

- Track 25 : Pisa1_23
- Track 26 : Findley_20, Strobilo_20
- Track 27 : ZoeJ_20, Doughnut_20, Milly_20, DismalStressor_20, DismalFunk_20, Mufasa_20, Marcoliusprime_20, BoostSeason_20
- Track 28 : TM4_20
- Track 29 : MacnCheese_24
- Track 30 : TBond007_23, Pixie_23
- Track 31 : Hurricane_23, Keshu_23, Lea83_23, ShedlockHolmes_23
- Track 32 : Pharb_23
- Track 33 : TribbleTrouble_22
- Track 34 : YasnayaPolyana_25, Wintermute_25, Bobquesha_26, Patt_25, Mitti_25, Juliette_25, Eponine_25, Fionnbharth_25, Kraw_25, OmniCritical_25, SamScheppers_23, Chancellor_25, Lebo14_25, Qhanda_26, JF1_25, MissDaisy_25, Y2_25, Cheetobro_25, DanSyl44_26, Ruthiejr_24, Slarp_25, Malthus_26, Taquito_23, Y10_25
- Track 35 : Reptar3000_25
- Track 36 : Omnicron_23
- Track 37 : Edugator_22, Neighly_23, Larva_23, SoSeph_22, Leston_22, Feyre_22, Heftyboy_22, Thyatira_22, Psycho_23, Guillsminger_22, Gengar_22, Waterfoul_22, Dadosky_23, AlleyCat_23, Paola_22
- Track 38 : Rando14_23
- Track 39 : LilDirt_21, ViviJ_21, Agent47_22, Collard_22, BananenDer11_22, Kratio_21, Miryou_22, InvictusManeo_22, DoubleChamp_22, OkiRoe_22
- Track 40 : Ekdilam_21
- Track 41 : Phrank_23, Tierra_23, Bryler_23, Cain_23
- Track 42 : Krueger_23, Syra333_23, Tigress9_24, Shadow1_22
- Track 43 : DarthP_23, Hammy_23, Amohnition_23
- Track 44 : Sunflower1121_22
- Track 45 : November_22
- Track 46 : TClif_23
- Track 47 : Ximenita_24
- Track 48 : Yuna_25
- Track 49 : Amgine_22, Ellie_21, Applecrisp_22
- Track 50 : PhelpsODU_23, Unicorn_23
- Track 51 : SirPhilip_23
- Track 52 : Marshawn_25
- Track 53 : Lavahound_22
- Track 54 : Fefferhead_23
- Track 55 : Aminay_22
- Track 56 : Boilgate_21
- Track 57 : TPA4_21
- Track 58 : P3MA_19

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 169 of the 200 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_24, Adephegia_24, Adonis_24, Agent47_22, Ageofdapage_24, AlishaPH_24, AlleyCat_23, Amelie_20, Amgine_22, Aminay_22, Amohntion_23, Anaya_25, Angelica_24, Anma_24, Apocalypse_24, Applecrisp_22, Asayake_24, Atiba_24, BEEST_24, BGIlluviae_24, BaghaKamala_24, BananenDer11_22, BarrelRoll_24, Beezoo_24, Bella96_24, Belladonna_24, Bern_24, Biglebops_20, Blizzard_24, Boiiii_24, BoostSeason_20, Bryler_23, CREW_24, Cain_23, CallaLilly_24, Capricorn_24, CaseJules_24, Chavito_24, CheetoDust_24, Clipper_24, Collard_22, CrimD_24, Curiosium_25, Dadosky_23, Dalmuri_24, DartGoblin_24, DarthP_23, Deby_24, Devera_24, DismalFunk_20, DismalStressor_20, Dole_24, DoubleChamp_22, Doughnut_20, DrHayes_24, Durfee_24, Edugator_22, Efra2_24, Ekdilam_21, Ellie_21, Emerson_24, Enkosi_20, Fefferhead_23, Feyre_22, Findley_20, Ganymede_25, Gengar_22, Geraldini_24, Guanica15_24, Guillsminger_22, Hammy_23, HedwigODU_24, Heftyboy_22, Homura_24, Hurricane_23, Hyperbowlee_24, Illumine_24, Inky_24, InvictusManeo_22, JAWS_24, Jarvi_24, Jayhawk_24, Jeckyll_24, Joy99_24, Keshu_23, Kratio_21, Krueger_23, Larva_23, LastHope_24, LaterM_24, Lea83_23, Leston_22, LilDirt_21, LilPharaoh_20, LindNT_24, Llorens_24, Lunahalos_24, MacKat_24, MacnCheese_24, Marcoliusprime_20, Marshawn_25, Mdavu_20, MeaningOfLife_24, Megsy_24, Milly_20, Miryou_22, Mufasa_20, Murucutumbu_24, Mynx_24, Neighly_23, Nikao_20, Niklas_24, November_22, Nutello_20, OkiRoe_22, Omnicron_23, Padfoot_24, Padpat_24, Paola_22, Peanam_24, Peel_24, Pharb_23, PhelpsODU_23, Phrank_23, Piatt_24, Pisa1_23, Pixie_23, Pokerus_23, Prithvi_24, Psycho_23, QuincyRose_23, Ramen_24, Rando14_23, Rapunzel97_24, Rosmarinus_24, SamuelLPlaqson_24, SgtBeansprout_20, Shadow1_22, Shaobing_24, ShedlockHolmes_23, ShiaSurprise_24, SirPhilip_23, Slimphazie_24, SoSeph_22, Spock_24, Stinson_24, Strobilo_20, Sulley_24, Sunflower1121_22, Syra333_23, TBond007_23, TClif_23, TM4_20, Tachez_24, TaiwanKao_25, Teejan_20, Thyatira_22, Tierra_23, Tigress9_24, TingHuaYa_24, TiniBug_24, Tiri_24, Topper_24, Torres_20, TreyKay_24, TribbleTrouble_22, Trice_20, TruffulaTree_24, Twitch_24, Unicorn_23, Urkel_24, Validus_24, Veliki_24, ViviJ_21, Waterfoul_22, Ximenita_24, YoureAdopted_23, Yuna_25, Yunkel11_24, Zabiza_24, Zavala_24, ZoeJ_20,

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

- Dartin_24, Lavahound_22, McMater_24, Pisa4_23, Richo_24,

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

- Bobquesha_26, Boilgate_21, Chancellor_25, Cheetobro_25, Chris_23, DanSyl44_26, Eponine_25, Fionnbharth_25, JF1_25, Juliette_25, KiSi_23, Kraw_25, LeMond_23, Lebo14_25, Malthus_26, MarkPhew_24, MissDaisy_25, Mitti_25, Nibb_23, OmniCritical_25, Oscar_23, P3MA_19, Patt_25, Qhanda_26, Reptar3000_25, Ruthiejr_24, SamScheppers_23, Scarlett_23, Slarp_25, TPA4_21, Taquito_23, Wintermute_25, Y10_25, Y2_25, YasnayaPolyana_25,

Summary by start number:

Start 3:

- Found in 25 of 222 (11.3%) of genes in pham
- Manual Annotations of this start: 22 of 200
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobquesha_26 (K4), Chancellor_25 (K4), Cheetobro_25 (K4), DanSyl44_26 (K4), Eponine_25 (K4), Fionnbharth_25 (K4), JF1_25 (K4), Juliette_25 (K4), Kraw_25 (K4), Lebo14_25 (K4), Malthus_26 (K4),

MissDaisy_25 (K4), Mitti_25 (K4), OmniCritical_25 (K4), Patt_25 (K4), Qhanda_26 (K4), Reptar3000_25 (K4), Ruthiejr_24 (K4), SamScheppers_23 (K4), Slarp_25 (K4), Taquito_23 (K4), Wintermute_25 (K4), Y10_25 (K4), Y2_25 (K4), YasnayaPolyana_25 (K4),

Start 4:

- Found in 1 of 222 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 200
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_21 (K8),

Start 5:

- Found in 187 of 222 (84.2%) of genes in pham
- Manual Annotations of this start: 169 of 200
- Called 97.3% of time when present
- Phage (with cluster) where this start called: ActinUp_24 (K1), Adephagia_24 (K1), Adonis_24 (K1), Agent47_22 (K5), Ageofdapage_24 (K1), AlishaPH_24 (K1), AlleyCat_23 (K5), Amelie_20 (K1), Amgine_22 (K6), Aminay_22 (K7), Amohntion_23 (K6), Anaya_25 (K1), Angelica_24 (K1), Anma_24 (K1), Apocalypse_24 (K1), Applecrisp_22 (K6), Asayake_24 (K1), Atiba_24 (K1), BEEST_24 (K1), BGIlluviae_24 (K1), BaghaKamala_24 (K1), BananenDer11_22 (K5), BarrelRoll_24 (K1), Beezoo_24 (K1), Bella96_24 (K1), Belladonna_24 (K1), Bern_24 (K1), Binglebops_20 (K1), Blizzard_24 (K1), Boiiii_24 (K1), BoostSeason_20 (K2), Bryler_23 (K6), CREW_24 (K1), Cain_23 (K6), CallaLilly_24 (K1), Capricorn_24 (K1), CaseJules_24 (K1), Chavito_24 (K1), CheetoDust_24 (K1), Clipper_24 (K1), Collard_22 (K5), CrimD_24 (K1), Curiosium_25 (K1), Dadosky_23 (K5), Dalmuri_24 (K1), DartGoblin_24 (K1), DARTH_23 (K6), Deby_24 (K1), Devera_24 (K1), DismalFunk_20 (K2), DismalStressor_20 (K2), Dole_24 (K1), DoubleChamp_22 (K5), Doughnut_20 (K2), DrHayes_24 (K1), Durfee_24 (K1), Edugator_22 (K5), Efra2_24 (K1), Ekdilam_21 (K6), Ellie_21 (K6), Emerson_24 (K1), Enkosi_20 (K1), Fefferhead_23 (K6), Feyre_22 (K5), Findley_20 (K2), Ganymede_25 (K1), Gengar_22 (K5), Geraldini_24 (K1), Guanica15_24 (K1), Guillsminger_22 (K5), Hammy_23 (K6), HedwigODU_24 (K1), Heftyboy_22 (K5), Homura_24 (K1), Hurricane_23 (K3), Hyperbowlee_24 (K1), Illumine_24 (K1), Inky_24 (K1), InvictusManeo_22 (K5), JAWS_24 (K1), Jarvi_24 (K1), Jayhawk_24 (K1), Jeckyll_24 (K1), Joy99_24 (K1), Keshu_23 (K3), Kratio_21 (K5), Krueger_23 (K6), Larva_23 (K5), LastHope_24 (K1), LaterM_24 (K1), Lea83_23 (K3), Leston_22 (K5), LilDirt_21 (K5), LilPharaoh_20 (K1), LindNT_24 (K1), Llorens_24 (K1), Lunahalos_24 (K1), MacKat_24 (K1), MacnCheese_24 (K3), Marcoliusprime_20 (K2), Marshawn_25 (K6), Mdavu_20 (K1), MeaningOfLife_24 (K1), Megsy_24 (K1), Milly_20 (K2), Miryou_22 (K5), Mufasa_20 (K2), Murucutumbu_24 (K1), Mynx_24 (K1), Neighly_23 (K3), Nikao_20 (K1), Niklas_24 (K1), November_22 (K6), Nutello_20 (K1), OkiRoe_22 (K5), Omnicron_23 (K5), Padfoot_24 (K1), Padpat_24 (K1), Paola_22 (K5), Peanam_24 (K1), Peel_24 (K1), Pharb_23 (K3), PhelpsODU_23 (K6), Phrank_23 (K6), Piatt_24 (K1), Pisa1_23 (K1), Pixie_23 (K3), Pokerus_23 (K1), Prithvi_24 (K1), Psycho_23 (K5), QuincyRose_23 (K1), Ramen_24 (K1), Rando14_23 (K5), Rapunzel97_24 (K1), Rosmarinus_24 (K1), SamuelLPlaqson_24 (K1), SgtBeansprout_20 (K1), Shadow1_22 (K6), Shaobing_24 (K1), ShedlockHolmes_23 (K3), ShiaSurprise_24 (K1), SirPhilip_23 (K6), Slimphazie_24 (K1), SoSeph_22 (K5), Spock_24 (K1), Stinson_24 (K1), Strobilo_20 (K2), Sulley_24 (K1), Sunflower1121_22 (K6), Syra333_23 (K6), TBond007_23 (K3), TClif_23 (K6), TM4_20 (K2), Tachez_24 (K1), TaiwanKao_25 (K1), Teejan_20 (K1), Thyatira_22 (K5), Tierra_23 (K6), Tigress9_24 (K6), TingHuaYa_24 (K1), TiniBug_24 (K1), Tiri_24 (K1), Topper_24 (K1), Torres_20 (K1), TreyKay_24 (K1),

TribleTrouble_22 (K3), Trice_20 (K1), TruffulaTree_24 (K1), Twitch_24 (K1), Unicorn_23 (K6), Urkel_24 (K1), Validus_24 (K1), Veliki_24 (K1), ViviJ_21 (K5), Waterfoul_22 (K5), Ximenita_24 (K6), YoureAdopted_23 (K1), Yuna_25 (K6), Yunkel11_24 (K1), Zabiza_24 (K1), Zavala_24 (K1), ZoeJ_20 (K2),

Start 7:

- Found in 7 of 222 (3.2%) of genes in pham
- Manual Annotations of this start: 6 of 200
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Chris_23 (K1), KiSi_23 (K1), LeMond_23 (K1), Nibb_23 (K1), Oscar_23 (K1), Scarlett_23 (K1),

Start 10:

- Found in 56 of 222 (25.2%) of genes in pham
- Manual Annotations of this start: 1 of 200
- Called 1.8% of time when present
- Phage (with cluster) where this start called: MarkPhew_24 (K1),

Start 11:

- Found in 27 of 222 (12.2%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Dartin_24 (K1), McMater_24 (K1), Richo_24 (K1),

Start 15:

- Found in 131 of 222 (59.0%) of genes in pham
- No Manual Annotations of this start.
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Lavahound_22 (K6), Pisa4_23 (K1),

Start 18:

- Found in 1 of 222 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_21 (singleton),

Start 23:

- Found in 1 of 222 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 200
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P3MA_19 (singleton),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, K3, K2, K1, K7, K6, K5, K4, K8,

Info for manual annotations of cluster K1:

- Start number 5 was manually annotated 101 times for cluster K1.
- Start number 7 was manually annotated 6 times for cluster K1.
- Start number 10 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 5 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 5 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 3 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 5 was manually annotated 23 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 5 was manually annotated 24 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 5 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 4 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: ActinUp_24 Start: 18923, Stop: 19399, Start Num: 5

Candidate Starts for ActinUp_24:

(Start: 5 @18923 has 169 MA's), (13, 18956), (15, 18968), (19, 18998), (27, 19058), (29, 19070), (30, 19076), (36, 19130), (41, 19190),

Gene: Adephagia_24 Start: 18920, Stop: 19396, Start Num: 5

Candidate Starts for Adephagia_24:

(Start: 5 @18920 has 169 MA's), (13, 18953), (15, 18965), (19, 18995), (27, 19055), (29, 19067), (30, 19073), (36, 19127), (41, 19187),

Gene: Adonis_24 Start: 18926, Stop: 19402, Start Num: 5

Candidate Starts for Adonis_24:

(Start: 5 @18926 has 169 MA's), (13, 18959), (15, 18971), (19, 19001), (27, 19061), (29, 19073), (30, 19079), (36, 19133), (41, 19193),

Gene: Agent47_22 Start: 19364, Stop: 19873, Start Num: 5

Candidate Starts for Agent47_22:

(Start: 5 @19364 has 169 MA's), (Start: 10 @19379 has 1 MA's), (19, 19433), (34, 19544), (41, 19646), (45, 19715),

Gene: Ageofdapage_24 Start: 18854, Stop: 19330, Start Num: 5

Candidate Starts for Ageofdapage_24:

(Start: 5 @18854 has 169 MA's), (13, 18887), (15, 18899), (17, 18917), (19, 18929), (24, 18962), (27, 18989), (29, 19001), (30, 19007), (41, 19121),

Gene: AlishaPH_24 Start: 18913, Stop: 19389, Start Num: 5

Candidate Starts for AlishaPH_24:

(Start: 5 @18913 has 169 MA's), (13, 18946), (15, 18958), (19, 18988), (27, 19048), (29, 19060), (30, 19066), (36, 19120), (41, 19180),

Gene: AlleyCat_23 Start: 19301, Stop: 19810, Start Num: 5

Candidate Starts for AlleyCat_23:

(Start: 5 @19301 has 169 MA's), (Start: 10 @19316 has 1 MA's), (19, 19370), (34, 19481), (41, 19583),

Gene: Amelie_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Amelie_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Amgine_22 Start: 19009, Stop: 19494, Start Num: 5

Candidate Starts for Amgine_22:

(Start: 5 @19009 has 169 MA's), (Start: 10 @19024 has 1 MA's), (13, 19042), (15, 19054), (19, 19084), (27, 19144), (29, 19156), (30, 19162), (32, 19177), (38, 19234), (41, 19276), (48, 19396),

Gene: Aminay_22 Start: 19210, Stop: 19692, Start Num: 5

Candidate Starts for Aminay_22:

(1, 18916), (Start: 5 @19210 has 169 MA's), (11, 19234), (13, 19243), (15, 19255), (19, 19279), (27, 19339), (30, 19357), (38, 19429), (41, 19492),

Gene: Amohnition_23 Start: 19395, Stop: 19892, Start Num: 5

Candidate Starts for Amohnition_23:

(Start: 5 @19395 has 169 MA's), (11, 19419), (13, 19428), (15, 19440), (17, 19458), (19, 19470), (27, 19530), (28, 19539), (30, 19548), (32, 19563), (38, 19620), (41, 19662), (56, 19857),

Gene: Anaya_25 Start: 18939, Stop: 19415, Start Num: 5

Candidate Starts for Anaya_25:

(Start: 5 @18939 has 169 MA's), (Start: 10 @18954 has 1 MA's), (13, 18972), (19, 19014), (27, 19074), (30, 19092), (36, 19146), (41, 19206),

Gene: Angelica_24 Start: 18888, Stop: 19364, Start Num: 5

Candidate Starts for Angelica_24:

(Start: 5 @18888 has 169 MA's), (13, 18921), (15, 18933), (19, 18963), (27, 19023), (29, 19035), (30, 19041), (36, 19095), (41, 19155), (45, 19224),

Gene: Anma_24 Start: 18868, Stop: 19344, Start Num: 5

Candidate Starts for Anma_24:

(Start: 5 @18868 has 169 MA's), (Start: 10 @18883 has 1 MA's), (13, 18901), (15, 18913), (17, 18931), (27, 19003), (29, 19015), (30, 19021), (32, 19036), (33, 19045), (36, 19075), (40, 19111), (41, 19135),

Gene: Apocalypse_24 Start: 18891, Stop: 19367, Start Num: 5

Candidate Starts for Apocalypse_24:

(Start: 5 @18891 has 169 MA's), (13, 18924), (15, 18936), (19, 18966), (27, 19026), (29, 19038), (30, 19044), (36, 19098), (41, 19158),

Gene: Applecrisp_22 Start: 19420, Stop: 19908, Start Num: 5

Candidate Starts for Applecrisp_22:

(Start: 5 @19420 has 169 MA's), (Start: 10 @19435 has 1 MA's), (13, 19453), (15, 19465), (19, 19495), (27, 19555), (29, 19567), (30, 19573), (32, 19588), (38, 19645), (41, 19687), (48, 19807),

Gene: Asayake_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Asayake_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Atiba_24 Start: 18883, Stop: 19359, Start Num: 5

Candidate Starts for Atiba_24:

(Start: 5 @18883 has 169 MA's), (13, 18916), (15, 18928), (19, 18958), (27, 19018), (29, 19030), (30, 19036), (36, 19090), (41, 19150),

Gene: BEEST_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for BEEST_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: BGlluviae_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for BGlluviae_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: BaghaKamala_24 Start: 18883, Stop: 19359, Start Num: 5

Candidate Starts for BaghaKamala_24:

(Start: 5 @18883 has 169 MA's), (13, 18916), (15, 18928), (19, 18958), (27, 19018), (29, 19030), (30, 19036), (36, 19090), (41, 19150),

Gene: BananenDer11_22 Start: 19325, Stop: 19834, Start Num: 5

Candidate Starts for BananenDer11_22:

(Start: 5 @19325 has 169 MA's), (Start: 10 @19340 has 1 MA's), (19, 19394), (34, 19505), (41, 19607), (45, 19676),

Gene: BarrelRoll_24 Start: 18906, Stop: 19382, Start Num: 5

Candidate Starts for BarrelRoll_24:

(Start: 5 @18906 has 169 MA's), (13, 18939), (15, 18951), (19, 18981), (27, 19041), (29, 19053), (30, 19059), (36, 19113), (41, 19173),

Gene: Beezoo_24 Start: 18930, Stop: 19406, Start Num: 5

Candidate Starts for Beezoo_24:

(Start: 5 @18930 has 169 MA's), (13, 18963), (15, 18975), (19, 19005), (27, 19065), (29, 19077), (30, 19083), (36, 19137), (41, 19197),

Gene: Bella96_24 Start: 18850, Stop: 19326, Start Num: 5

Candidate Starts for Bella96_24:

(Start: 5 @18850 has 169 MA's), (Start: 10 @18865 has 1 MA's), (13, 18883), (15, 18895), (17, 18913), (27, 18985), (29, 18997), (30, 19003), (32, 19018), (33, 19027), (36, 19057), (40, 19093), (41, 19117),

Gene: Belladonna_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Belladonna_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Bern_24 Start: 18878, Stop: 19354, Start Num: 5

Candidate Starts for Bern_24:

(Start: 5 @18878 has 169 MA's), (Start: 10 @18893 has 1 MA's), (13, 18911), (15, 18923), (19, 18953), (27, 19013), (30, 19031), (41, 19145), (52, 19301),

Gene: Biglebops_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Biglebops_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Blizzard_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Blizzard_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Bobquesha_26 Start: 20155, Stop: 20673, Start Num: 3

Candidate Starts for Bobquesha_26:

(Start: 3 @20155 has 22 MA's), (19, 20239), (27, 20299), (30, 20317), (38, 20389), (41, 20452), (57, 20662),

Gene: Boiiii_24 Start: 18956, Stop: 19432, Start Num: 5

Candidate Starts for Boiiii_24:

(Start: 5 @18956 has 169 MA's), (13, 18989), (15, 19001), (19, 19031), (27, 19091), (29, 19103), (30, 19109), (36, 19163), (41, 19223),

Gene: Boilgate_21 Start: 19350, Stop: 19856, Start Num: 4

Candidate Starts for Boilgate_21:

(Start: 4 @19350 has 1 MA's), (6, 19362), (11, 19380), (17, 19410), (19, 19422), (21, 19443), (30, 19500), (31, 19503), (38, 19572),

Gene: BoostSeason_20 Start: 16808, Stop: 17272, Start Num: 5

Candidate Starts for BoostSeason_20:

(2, 16763), (Start: 5 @16808 has 169 MA's), (16, 16841), (19, 16862), (25, 16904), (27, 16922), (30, 16940), (50, 17180),

Gene: Bryler_23 Start: 18116, Stop: 18589, Start Num: 5

Candidate Starts for Bryler_23:

(Start: 5 @18116 has 169 MA's), (13, 18149), (15, 18161), (17, 18179), (19, 18191), (30, 18269), (36, 18323), (38, 18341), (41, 18383),

Gene: CREW_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for CREW_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Cain_23 Start: 18104, Stop: 18577, Start Num: 5

Candidate Starts for Cain_23:

(Start: 5 @18104 has 169 MA's), (13, 18137), (15, 18149), (17, 18167), (19, 18179), (30, 18257), (36, 18311), (38, 18329), (41, 18371),

Gene: CallaLilly_24 Start: 18877, Stop: 19353, Start Num: 5

Candidate Starts for CallaLilly_24:

(Start: 5 @18877 has 169 MA's), (13, 18910), (15, 18922), (19, 18952), (27, 19012), (29, 19024), (30, 19030), (36, 19084), (41, 19144),

Gene: Capricorn_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Capricorn_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: CaseJules_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for CaseJules_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Chancellor_25 Start: 20421, Stop: 20939, Start Num: 3

Candidate Starts for Chancellor_25:

(Start: 3 @20421 has 22 MA's), (19, 20505), (27, 20565), (30, 20583), (38, 20655), (41, 20718), (57, 20928),

Gene: Chavito_24 Start: 18290, Stop: 18766, Start Num: 5

Candidate Starts for Chavito_24:

(2, 18245), (Start: 5 @18290 has 169 MA's), (8, 18296), (11, 18314), (13, 18323), (15, 18335), (19, 18365), (22, 18389), (27, 18425), (30, 18443), (41, 18557), (56, 18752),

Gene: CheetoDust_24 Start: 18931, Stop: 19407, Start Num: 5

Candidate Starts for CheetoDust_24:

(Start: 5 @18931 has 169 MA's), (13, 18964), (15, 18976), (19, 19006), (27, 19066), (29, 19078), (30, 19084), (36, 19138), (41, 19198),

Gene: Cheetobro_25 Start: 20418, Stop: 20936, Start Num: 3

Candidate Starts for Cheetobro_25:

(Start: 3 @20418 has 22 MA's), (19, 20502), (27, 20562), (30, 20580), (38, 20652), (41, 20715), (57, 20925),

Gene: Chris_23 Start: 18146, Stop: 18661, Start Num: 7

Candidate Starts for Chris_23:

(Start: 7 @18146 has 6 MA's), (8, 18149), (Start: 10 @18158 has 1 MA's), (13, 18176), (19, 18218), (29, 18290), (30, 18296), (36, 18350), (40, 18386), (41, 18410), (56, 18596), (60, 18650),

Gene: Clipper_24 Start: 18931, Stop: 19407, Start Num: 5

Candidate Starts for Clipper_24:

(Start: 5 @18931 has 169 MA's), (13, 18964), (15, 18976), (19, 19006), (27, 19066), (29, 19078), (30, 19084), (36, 19138), (41, 19198),

Gene: Collard_22 Start: 19325, Stop: 19834, Start Num: 5

Candidate Starts for Collard_22:

(Start: 5 @19325 has 169 MA's), (Start: 10 @19340 has 1 MA's), (19, 19394), (34, 19505), (41, 19607), (45, 19676),

Gene: CrimD_24 Start: 18892, Stop: 19368, Start Num: 5

Candidate Starts for CrimD_24:

(Start: 5 @18892 has 169 MA's), (13, 18925), (15, 18937), (19, 18967), (27, 19027), (29, 19039), (30, 19045), (36, 19099), (41, 19159),

Gene: Curiosium_25 Start: 18640, Stop: 19101, Start Num: 5

Candidate Starts for Curiosium_25:

(Start: 5 @18640 has 169 MA's), (Start: 10 @18655 has 1 MA's), (11, 18664), (13, 18673), (15, 18685), (19, 18715), (27, 18775), (29, 18787), (30, 18793), (36, 18847), (41, 18907),

Gene: Dadosky_23 Start: 19302, Stop: 19811, Start Num: 5
Candidate Starts for Dadosky_23:
(Start: 5 @19302 has 169 MA's), (Start: 10 @19317 has 1 MA's), (19, 19371), (34, 19482), (41, 19584),

Gene: Dalmuri_24 Start: 18954, Stop: 19430, Start Num: 5
Candidate Starts for Dalmuri_24:
(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: DanSyl44_26 Start: 20424, Stop: 20942, Start Num: 3
Candidate Starts for DanSyl44_26:
(Start: 3 @20424 has 22 MA's), (19, 20508), (27, 20568), (30, 20586), (38, 20658), (41, 20721), (57, 20931),

Gene: DartGoblin_24 Start: 18847, Stop: 19323, Start Num: 5
Candidate Starts for DartGoblin_24:
(Start: 5 @18847 has 169 MA's), (Start: 10 @18862 has 1 MA's), (13, 18880), (15, 18892), (17, 18910), (27, 18982), (29, 18994), (30, 19000), (32, 19015), (33, 19024), (36, 19054), (40, 19090), (41, 19114),

Gene: DarthP_23 Start: 19344, Stop: 19838, Start Num: 5
Candidate Starts for DarthP_23:
(Start: 5 @19344 has 169 MA's), (11, 19368), (13, 19377), (15, 19389), (17, 19407), (19, 19419), (27, 19479), (28, 19488), (30, 19497), (32, 19512), (38, 19569), (41, 19611), (56, 19806),

Gene: Dartin_24 Start: 18304, Stop: 18756, Start Num: 11
Candidate Starts for Dartin_24:
(2, 18235), (Start: 5 @18280 has 169 MA's), (8, 18286), (11, 18304), (13, 18313), (15, 18325), (19, 18355), (27, 18415), (30, 18433), (41, 18547),

Gene: Deby_24 Start: 18888, Stop: 19364, Start Num: 5
Candidate Starts for Deby_24:
(Start: 5 @18888 has 169 MA's), (13, 18921), (15, 18933), (19, 18963), (27, 19023), (29, 19035), (30, 19041), (36, 19095), (41, 19155), (45, 19224),

Gene: Devera_24 Start: 18935, Stop: 19411, Start Num: 5
Candidate Starts for Devera_24:
(Start: 5 @18935 has 169 MA's), (13, 18968), (15, 18980), (17, 18998), (19, 19010), (27, 19070), (29, 19082), (30, 19088), (32, 19103), (41, 19202),

Gene: DismalFunk_20 Start: 16782, Stop: 17246, Start Num: 5
Candidate Starts for DismalFunk_20:
(2, 16737), (Start: 5 @16782 has 169 MA's), (16, 16815), (19, 16836), (25, 16878), (27, 16896), (30, 16914), (50, 17154),

Gene: DismalStressor_20 Start: 16782, Stop: 17246, Start Num: 5
Candidate Starts for DismalStressor_20:
(2, 16737), (Start: 5 @16782 has 169 MA's), (16, 16815), (19, 16836), (25, 16878), (27, 16896), (30, 16914), (50, 17154),

Gene: Dole_24 Start: 18937, Stop: 19413, Start Num: 5
Candidate Starts for Dole_24:
(Start: 5 @18937 has 169 MA's), (13, 18970), (15, 18982), (17, 19000), (19, 19012), (27, 19072), (29, 19084), (30, 19090), (32, 19105), (41, 19204),

Gene: DoubleChamp_22 Start: 19325, Stop: 19834, Start Num: 5
Candidate Starts for DoubleChamp_22:
(Start: 5 @19325 has 169 MA's), (Start: 10 @19340 has 1 MA's), (19, 19394), (34, 19505), (41, 19607),
(45, 19676),

Gene: Doughnut_20 Start: 16802, Stop: 17266, Start Num: 5
Candidate Starts for Doughnut_20:
(2, 16757), (Start: 5 @16802 has 169 MA's), (16, 16835), (19, 16856), (25, 16898), (27, 16916), (30,
16934), (50, 17174),

Gene: DrHayes_24 Start: 18868, Stop: 19344, Start Num: 5
Candidate Starts for DrHayes_24:
(Start: 5 @18868 has 169 MA's), (Start: 10 @18883 has 1 MA's), (13, 18901), (15, 18913), (17, 18931),
(27, 19003), (29, 19015), (30, 19021), (32, 19036), (33, 19045), (36, 19075), (40, 19111), (41, 19135),

Gene: Durfee_24 Start: 18954, Stop: 19430, Start Num: 5
Candidate Starts for Durfee_24:
(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30,
19107), (36, 19161), (41, 19221),

Gene: Edugator_22 Start: 19301, Stop: 19810, Start Num: 5
Candidate Starts for Edugator_22:
(Start: 5 @19301 has 169 MA's), (Start: 10 @19316 has 1 MA's), (19, 19370), (34, 19481), (41, 19583),

Gene: Efra2_24 Start: 18130, Stop: 18600, Start Num: 5
Candidate Starts for Efra2_24:
(Start: 5 @18130 has 169 MA's), (Start: 10 @18145 has 1 MA's), (13, 18163), (15, 18175), (19, 18205),
(27, 18265), (30, 18283), (36, 18337), (41, 18397),

Gene: Ekdilam_21 Start: 19106, Stop: 19603, Start Num: 5
Candidate Starts for Ekdilam_21:
(Start: 5 @19106 has 169 MA's), (11, 19130), (13, 19139), (15, 19151), (17, 19169), (19, 19181), (27,
19241), (28, 19250), (30, 19259), (32, 19274), (38, 19331), (41, 19373), (56, 19568),

Gene: Ellie_21 Start: 19090, Stop: 19578, Start Num: 5
Candidate Starts for Ellie_21:
(Start: 5 @19090 has 169 MA's), (Start: 10 @19105 has 1 MA's), (13, 19123), (15, 19135), (19, 19165),
(27, 19225), (29, 19237), (30, 19243), (32, 19258), (38, 19315), (41, 19357), (48, 19477),

Gene: Emerson_24 Start: 18914, Stop: 19390, Start Num: 5
Candidate Starts for Emerson_24:
(Start: 5 @18914 has 169 MA's), (13, 18947), (15, 18959), (19, 18989), (27, 19049), (29, 19061), (30,
19067), (36, 19121), (41, 19181),

Gene: Enkosi_20 Start: 18463, Stop: 18939, Start Num: 5
Candidate Starts for Enkosi_20:
(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27,
18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Eponine_25 Start: 20311, Stop: 20829, Start Num: 3
Candidate Starts for Eponine_25:

(Start: 3 @20311 has 22 MA's), (19, 20395), (27, 20455), (30, 20473), (38, 20545), (41, 20608), (57, 20818),

Gene: Fefferhead_23 Start: 19257, Stop: 19745, Start Num: 5

Candidate Starts for Fefferhead_23:

(Start: 5 @19257 has 169 MA's), (Start: 10 @19272 has 1 MA's), (13, 19290), (15, 19302), (19, 19332), (27, 19392), (29, 19404), (30, 19410), (32, 19425), (38, 19482), (41, 19524),

Gene: Feyre_22 Start: 19186, Stop: 19695, Start Num: 5

Candidate Starts for Feyre_22:

(Start: 5 @19186 has 169 MA's), (Start: 10 @19201 has 1 MA's), (19, 19255), (34, 19366), (41, 19468),

Gene: Findley_20 Start: 16785, Stop: 17249, Start Num: 5

Candidate Starts for Findley_20:

(2, 16740), (Start: 5 @16785 has 169 MA's), (16, 16818), (19, 16839), (25, 16881), (27, 16899), (30, 16917), (50, 17157),

Gene: Fionnbharth_25 Start: 20411, Stop: 20929, Start Num: 3

Candidate Starts for Fionnbharth_25:

(Start: 3 @20411 has 22 MA's), (19, 20495), (27, 20555), (30, 20573), (38, 20645), (41, 20708), (57, 20918),

Gene: Ganymede_25 Start: 18934, Stop: 19410, Start Num: 5

Candidate Starts for Ganymede_25:

(Start: 5 @18934 has 169 MA's), (13, 18967), (15, 18979), (19, 19009), (27, 19069), (29, 19081), (30, 19087), (36, 19141), (41, 19201),

Gene: Gengar_22 Start: 19293, Stop: 19802, Start Num: 5

Candidate Starts for Gengar_22:

(Start: 5 @19293 has 169 MA's), (Start: 10 @19308 has 1 MA's), (19, 19362), (34, 19473), (41, 19575),

Gene: Geraldini_24 Start: 18930, Stop: 19406, Start Num: 5

Candidate Starts for Geraldini_24:

(Start: 5 @18930 has 169 MA's), (13, 18963), (15, 18975), (19, 19005), (27, 19065), (29, 19077), (30, 19083), (36, 19137), (41, 19197),

Gene: Guanica15_24 Start: 18146, Stop: 18616, Start Num: 5

Candidate Starts for Guanica15_24:

(Start: 5 @18146 has 169 MA's), (Start: 10 @18161 has 1 MA's), (13, 18179), (15, 18191), (19, 18221), (27, 18281), (30, 18299), (36, 18353), (41, 18413),

Gene: Guillsminger_22 Start: 19268, Stop: 19777, Start Num: 5

Candidate Starts for Guillsminger_22:

(Start: 5 @19268 has 169 MA's), (Start: 10 @19283 has 1 MA's), (19, 19337), (34, 19448), (41, 19550),

Gene: Hammy_23 Start: 19338, Stop: 19835, Start Num: 5

Candidate Starts for Hammy_23:

(Start: 5 @19338 has 169 MA's), (11, 19362), (13, 19371), (15, 19383), (17, 19401), (19, 19413), (27, 19473), (28, 19482), (30, 19491), (32, 19506), (38, 19563), (41, 19605), (56, 19800),

Gene: HedwigODU_24 Start: 18923, Stop: 19399, Start Num: 5

Candidate Starts for HedwigODU_24:

(Start: 5 @18923 has 169 MA's), (13, 18956), (15, 18968), (19, 18998), (27, 19058), (29, 19070), (30, 19076), (36, 19130), (41, 19190),

Gene: Heftyboy_22 Start: 19416, Stop: 19925, Start Num: 5

Candidate Starts for Heftyboy_22:

(Start: 5 @19416 has 169 MA's), (Start: 10 @19431 has 1 MA's), (19, 19485), (34, 19596), (41, 19698),

Gene: Homura_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Homura_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Hurricane_23 Start: 19350, Stop: 19862, Start Num: 5

Candidate Starts for Hurricane_23:

(2, 19305), (Start: 5 @19350 has 169 MA's), (12, 19377), (14, 19386), (19, 19422), (26, 19473), (27, 19482), (28, 19491), (30, 19500), (40, 19590), (50, 19740), (55, 19791),

Gene: Hyperbowlee_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Hyperbowlee_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Illumine_24 Start: 18937, Stop: 19413, Start Num: 5

Candidate Starts for Illumine_24:

(Start: 5 @18937 has 169 MA's), (13, 18970), (15, 18982), (17, 19000), (19, 19012), (27, 19072), (29, 19084), (30, 19090), (32, 19105), (41, 19204),

Gene: Inky_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Inky_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: InvictusManeo_22 Start: 19368, Stop: 19877, Start Num: 5

Candidate Starts for InvictusManeo_22:

(Start: 5 @19368 has 169 MA's), (Start: 10 @19383 has 1 MA's), (19, 19437), (34, 19548), (41, 19650), (45, 19719),

Gene: JAWS_24 Start: 18908, Stop: 19384, Start Num: 5

Candidate Starts for JAWS_24:

(Start: 5 @18908 has 169 MA's), (13, 18941), (15, 18953), (19, 18983), (27, 19043), (29, 19055), (30, 19061), (36, 19115), (41, 19175),

Gene: JF1_25 Start: 20410, Stop: 20928, Start Num: 3

Candidate Starts for JF1_25:

(Start: 3 @20410 has 22 MA's), (19, 20494), (27, 20554), (30, 20572), (38, 20644), (41, 20707), (57, 20917),

Gene: Jarvi_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Jarvi_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Jayhawk_24 Start: 18921, Stop: 19397, Start Num: 5

Candidate Starts for Jayhawk_24:

(Start: 5 @18921 has 169 MA's), (13, 18954), (15, 18966), (19, 18996), (27, 19056), (29, 19068), (30, 19074), (36, 19128), (41, 19188),

Gene: Jeckyll_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Jeckyll_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Joy99_24 Start: 18883, Stop: 19359, Start Num: 5

Candidate Starts for Joy99_24:

(Start: 5 @18883 has 169 MA's), (13, 18916), (15, 18928), (19, 18958), (27, 19018), (29, 19030), (30, 19036), (36, 19090), (41, 19150),

Gene: Juliette_25 Start: 20311, Stop: 20829, Start Num: 3

Candidate Starts for Juliette_25:

(Start: 3 @20311 has 22 MA's), (19, 20395), (27, 20455), (30, 20473), (38, 20545), (41, 20608), (57, 20818),

Gene: Keshu_23 Start: 19342, Stop: 19854, Start Num: 5

Candidate Starts for Keshu_23:

(2, 19297), (Start: 5 @19342 has 169 MA's), (12, 19369), (14, 19378), (19, 19414), (26, 19465), (27, 19474), (28, 19483), (30, 19492), (40, 19582), (50, 19732), (55, 19783),

Gene: KiSi_23 Start: 18086, Stop: 18562, Start Num: 7

Candidate Starts for KiSi_23:

(Start: 7 @18086 has 6 MA's), (8, 18089), (13, 18116), (15, 18128), (19, 18158), (29, 18230), (30, 18236), (36, 18290), (56, 18536),

Gene: Kratio_21 Start: 18999, Stop: 19508, Start Num: 5

Candidate Starts for Kratio_21:

(Start: 5 @18999 has 169 MA's), (Start: 10 @19014 has 1 MA's), (19, 19068), (34, 19179), (41, 19281), (45, 19350),

Gene: Kraw_25 Start: 20334, Stop: 20852, Start Num: 3

Candidate Starts for Kraw_25:

(Start: 3 @20334 has 22 MA's), (19, 20418), (27, 20478), (30, 20496), (38, 20568), (41, 20631), (57, 20841),

Gene: Krueger_23 Start: 18075, Stop: 18557, Start Num: 5

Candidate Starts for Krueger_23:

(Start: 5 @18075 has 169 MA's), (8, 18081), (13, 18108), (15, 18120), (19, 18150), (30, 18228), (38, 18300), (41, 18342),

Gene: Larva_23 Start: 19169, Stop: 19678, Start Num: 5

Candidate Starts for Larva_23:

(Start: 5 @19169 has 169 MA's), (Start: 10 @19184 has 1 MA's), (19, 19238), (34, 19349), (41, 19451),

Gene: LastHope_24 Start: 18217, Stop: 18693, Start Num: 5

Candidate Starts for LastHope_24:

(Start: 5 @18217 has 169 MA's), (Start: 10 @18232 has 1 MA's), (13, 18250), (15, 18262), (19, 18292), (22, 18316), (27, 18352), (29, 18364), (30, 18370), (36, 18424), (41, 18484),

Gene: LaterM_24 Start: 18882, Stop: 19358, Start Num: 5

Candidate Starts for LaterM_24:

(Start: 5 @18882 has 169 MA's), (13, 18915), (15, 18927), (17, 18945), (19, 18957), (27, 19017), (29, 19029), (30, 19035), (41, 19149),

Gene: Lavahound_22 Start: 19054, Stop: 19497, Start Num: 15

Candidate Starts for Lavahound_22:

(Start: 5 @19009 has 169 MA's), (Start: 10 @19024 has 1 MA's), (13, 19042), (15, 19054), (19, 19084), (27, 19144), (29, 19156), (30, 19162), (32, 19177), (38, 19234), (41, 19276), (48, 19396),

Gene: LeMond_23 Start: 18157, Stop: 18633, Start Num: 7

Candidate Starts for LeMond_23:

(Start: 7 @18157 has 6 MA's), (8, 18160), (13, 18187), (15, 18199), (19, 18229), (29, 18301), (30, 18307), (36, 18361), (56, 18607),

Gene: Lea83_23 Start: 19339, Stop: 19842, Start Num: 5

Candidate Starts for Lea83_23:

(2, 19294), (Start: 5 @19339 has 169 MA's), (12, 19357), (14, 19366), (19, 19402), (26, 19453), (27, 19462), (28, 19471), (30, 19480), (40, 19570), (50, 19720), (55, 19771),

Gene: Lebo14_25 Start: 20427, Stop: 20945, Start Num: 3

Candidate Starts for Lebo14_25:

(Start: 3 @20427 has 22 MA's), (19, 20511), (27, 20571), (30, 20589), (38, 20661), (41, 20724), (57, 20934),

Gene: Leston_22 Start: 19398, Stop: 19907, Start Num: 5

Candidate Starts for Leston_22:

(Start: 5 @19398 has 169 MA's), (Start: 10 @19413 has 1 MA's), (19, 19467), (34, 19578), (41, 19680),

Gene: LilDirt_21 Start: 19125, Stop: 19634, Start Num: 5

Candidate Starts for LilDirt_21:

(Start: 5 @19125 has 169 MA's), (Start: 10 @19140 has 1 MA's), (19, 19194), (34, 19305), (41, 19407), (45, 19476),

Gene: LilPharaoh_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for LilPharaoh_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: LindNT_24 Start: 18888, Stop: 19364, Start Num: 5

Candidate Starts for LindNT_24:

(Start: 5 @18888 has 169 MA's), (13, 18921), (15, 18933), (19, 18963), (27, 19023), (29, 19035), (30, 19041), (36, 19095), (41, 19155),

Gene: Llorens_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Llorens_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Lunahalos_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Lunahalos_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: MacKat_24 Start: 18931, Stop: 19407, Start Num: 5

Candidate Starts for MacKat_24:

(Start: 5 @18931 has 169 MA's), (13, 18964), (15, 18976), (19, 19006), (27, 19066), (29, 19078), (30, 19084), (36, 19138), (41, 19198),

Gene: MacnCheese_24 Start: 19584, Stop: 20096, Start Num: 5

Candidate Starts for MacnCheese_24:

(2, 19539), (Start: 5 @19584 has 169 MA's), (12, 19611), (14, 19620), (19, 19656), (26, 19707), (27, 19716), (28, 19725), (30, 19734), (40, 19824), (50, 19974), (55, 20025), (58, 20067), (59, 20088),

Gene: Malthus_26 Start: 20334, Stop: 20852, Start Num: 3

Candidate Starts for Malthus_26:

(Start: 3 @20334 has 22 MA's), (19, 20418), (27, 20478), (30, 20496), (38, 20568), (41, 20631), (57, 20841),

Gene: Marcoliusprime_20 Start: 16782, Stop: 17246, Start Num: 5

Candidate Starts for Marcoliusprime_20:

(2, 16737), (Start: 5 @16782 has 169 MA's), (16, 16815), (19, 16836), (25, 16878), (27, 16896), (30, 16914), (50, 17154),

Gene: MarkPhew_24 Start: 18066, Stop: 18518, Start Num: 10

Candidate Starts for MarkPhew_24:

(Start: 7 @18054 has 6 MA's), (8, 18057), (Start: 10 @18066 has 1 MA's), (13, 18084), (19, 18126), (29, 18198), (30, 18204), (36, 18258), (38, 18276), (41, 18318), (55, 18489),

Gene: Marshawn_25 Start: 18671, Stop: 19147, Start Num: 5

Candidate Starts for Marshawn_25:

(2, 18626), (Start: 5 @18671 has 169 MA's), (Start: 10 @18686 has 1 MA's), (11, 18695), (13, 18704), (17, 18734), (19, 18746), (22, 18770), (27, 18806), (29, 18818), (30, 18824), (33, 18848), (38, 18896), (41, 18938), (49, 19061), (51, 19070),

Gene: McMater_24 Start: 18304, Stop: 18756, Start Num: 11

Candidate Starts for McMater_24:

(2, 18235), (Start: 5 @18280 has 169 MA's), (8, 18286), (11, 18304), (13, 18313), (15, 18325), (19, 18355), (27, 18415), (30, 18433), (41, 18547),

Gene: Mdavu_20 Start: 18451, Stop: 18927, Start Num: 5

Candidate Starts for Mdavu_20:

(2, 18406), (Start: 5 @18451 has 169 MA's), (8, 18457), (11, 18475), (13, 18484), (19, 18526), (27, 18586), (30, 18604), (36, 18658), (38, 18676), (41, 18718),

Gene: MeaningOfLife_24 Start: 18890, Stop: 19366, Start Num: 5

Candidate Starts for MeaningOfLife_24:

(Start: 5 @18890 has 169 MA's), (13, 18923), (15, 18935), (19, 18965), (27, 19025), (29, 19037), (30, 19043), (36, 19097), (41, 19157),

Gene: Megsy_24 Start: 18891, Stop: 19367, Start Num: 5

Candidate Starts for Megsy_24:

(Start: 5 @18891 has 169 MA's), (13, 18924), (15, 18936), (19, 18966), (27, 19026), (29, 19038), (30, 19044), (36, 19098), (41, 19158),

Gene: Milly_20 Start: 16782, Stop: 17246, Start Num: 5

Candidate Starts for Milly_20:

(2, 16737), (Start: 5 @16782 has 169 MA's), (16, 16815), (19, 16836), (25, 16878), (27, 16896), (30, 16914), (50, 17154),

Gene: Miryou_22 Start: 19253, Stop: 19762, Start Num: 5

Candidate Starts for Miryou_22:

(Start: 5 @19253 has 169 MA's), (Start: 10 @19268 has 1 MA's), (19, 19322), (34, 19433), (41, 19535), (45, 19604),

Gene: MissDaisy_25 Start: 20173, Stop: 20691, Start Num: 3

Candidate Starts for MissDaisy_25:

(Start: 3 @20173 has 22 MA's), (19, 20257), (27, 20317), (30, 20335), (38, 20407), (41, 20470), (57, 20680),

Gene: Mitti_25 Start: 20334, Stop: 20852, Start Num: 3

Candidate Starts for Mitti_25:

(Start: 3 @20334 has 22 MA's), (19, 20418), (27, 20478), (30, 20496), (38, 20568), (41, 20631), (57, 20841),

Gene: Mufasa_20 Start: 16802, Stop: 17266, Start Num: 5

Candidate Starts for Mufasa_20:

(2, 16757), (Start: 5 @16802 has 169 MA's), (16, 16835), (19, 16856), (25, 16898), (27, 16916), (30, 16934), (50, 17174),

Gene: Murucutumbu_24 Start: 18872, Stop: 19348, Start Num: 5

Candidate Starts for Murucutumbu_24:

(Start: 5 @18872 has 169 MA's), (13, 18905), (15, 18917), (17, 18935), (19, 18947), (27, 19007), (29, 19019), (30, 19025), (41, 19139), (45, 19208),

Gene: Mynx_24 Start: 18937, Stop: 19413, Start Num: 5

Candidate Starts for Mynx_24:

(Start: 5 @18937 has 169 MA's), (13, 18970), (15, 18982), (19, 19012), (27, 19072), (29, 19084), (30, 19090), (36, 19144), (41, 19204),

Gene: Neighly_23 Start: 19168, Stop: 19677, Start Num: 5

Candidate Starts for Neighly_23:

(Start: 5 @19168 has 169 MA's), (Start: 10 @19183 has 1 MA's), (19, 19237), (34, 19348), (41, 19450),

Gene: Nibb_23 Start: 18198, Stop: 18662, Start Num: 7

Candidate Starts for Nibb_23:

(Start: 7 @18198 has 6 MA's), (8, 18201), (Start: 10 @18210 has 1 MA's), (13, 18228), (19, 18270), (29, 18342), (30, 18348), (36, 18402), (38, 18420), (40, 18438), (41, 18462), (55, 18633),

Gene: Nikao_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Nikao_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Niklas_24 Start: 18283, Stop: 18759, Start Num: 5

Candidate Starts for Niklas_24:

(2, 18238), (Start: 5 @18283 has 169 MA's), (8, 18289), (11, 18307), (13, 18316), (15, 18328), (19, 18358), (27, 18418), (30, 18436), (41, 18550),

Gene: November_22 Start: 19238, Stop: 19732, Start Num: 5

Candidate Starts for November_22:

(Start: 5 @19238 has 169 MA's), (Start: 10 @19253 has 1 MA's), (13, 19271), (15, 19283), (17, 19301), (19, 19313), (27, 19373), (28, 19382), (30, 19391), (32, 19406), (38, 19463), (41, 19505), (56, 19700),

Gene: Nutello_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Nutello_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: OkiRoe_22 Start: 19269, Stop: 19778, Start Num: 5

Candidate Starts for OkiRoe_22:

(Start: 5 @19269 has 169 MA's), (Start: 10 @19284 has 1 MA's), (19, 19338), (34, 19449), (41, 19551), (45, 19620),

Gene: OmniCritical_25 Start: 20319, Stop: 20837, Start Num: 3

Candidate Starts for OmniCritical_25:

(Start: 3 @20319 has 22 MA's), (19, 20403), (27, 20463), (30, 20481), (38, 20553), (41, 20616), (57, 20826),

Gene: Omnicron_23 Start: 18088, Stop: 18597, Start Num: 5

Candidate Starts for Omnicron_23:

(Start: 5 @18088 has 169 MA's), (Start: 10 @18103 has 1 MA's), (19, 18157), (34, 18268), (38, 18307), (41, 18370),

Gene: Oscar_23 Start: 18158, Stop: 18634, Start Num: 7

Candidate Starts for Oscar_23:

(Start: 7 @18158 has 6 MA's), (8, 18161), (13, 18188), (15, 18200), (19, 18230), (29, 18302), (30, 18308), (36, 18362), (56, 18608),

Gene: P3MA_19 Start: 16255, Stop: 16644, Start Num: 23

Candidate Starts for P3MA_19:

(Start: 23 @16255 has 1 MA's), (36, 16357), (44, 16501), (51, 16567), (53, 16597),

Gene: Padfoot_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Padfoot_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Padpat_24 Start: 18914, Stop: 19390, Start Num: 5

Candidate Starts for Padpat_24:

(Start: 5 @18914 has 169 MA's), (13, 18947), (15, 18959), (19, 18989), (27, 19049), (29, 19061), (30, 19067), (36, 19121), (41, 19181),

Gene: Paola_22 Start: 19268, Stop: 19777, Start Num: 5

Candidate Starts for Paola_22:

(Start: 5 @19268 has 169 MA's), (Start: 10 @19283 has 1 MA's), (19, 19337), (34, 19448), (41, 19550),

Gene: Patt_25 Start: 20152, Stop: 20670, Start Num: 3

Candidate Starts for Patt_25:

(Start: 3 @20152 has 22 MA's), (19, 20236), (27, 20296), (30, 20314), (38, 20386), (41, 20449), (57, 20659),

Gene: Peanam_24 Start: 18280, Stop: 18756, Start Num: 5

Candidate Starts for Peanam_24:

(2, 18235), (Start: 5 @18280 has 169 MA's), (8, 18286), (11, 18304), (13, 18313), (15, 18325), (19, 18355), (27, 18415), (30, 18433), (41, 18547),

Gene: Peel_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Peel_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Pharb_23 Start: 19190, Stop: 19702, Start Num: 5

Candidate Starts for Pharb_23:

(2, 19145), (Start: 5 @19190 has 169 MA's), (14, 19229), (19, 19265), (26, 19316), (27, 19325), (28, 19334), (30, 19343), (40, 19433), (55, 19631), (58, 19673),

Gene: PhelpsODU_23 Start: 18138, Stop: 18611, Start Num: 5

Candidate Starts for PhelpsODU_23:

(Start: 5 @18138 has 169 MA's), (13, 18171), (15, 18183), (17, 18201), (19, 18213), (30, 18291), (36, 18345), (38, 18363), (41, 18405), (43, 18465),

Gene: Phrank_23 Start: 18092, Stop: 18565, Start Num: 5

Candidate Starts for Phrank_23:

(Start: 5 @18092 has 169 MA's), (13, 18125), (15, 18137), (17, 18155), (19, 18167), (30, 18245), (36, 18299), (38, 18317), (41, 18359),

Gene: Piatt_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Piatt_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Pisa1_23 Start: 18992, Stop: 19468, Start Num: 5

Candidate Starts for Pisa1_23:

(Start: 5 @18992 has 169 MA's), (Start: 10 @19007 has 1 MA's), (13, 19025), (15, 19037), (19, 19067), (27, 19127), (30, 19145), (41, 19259),

Gene: Pisa4_23 Start: 19037, Stop: 19468, Start Num: 15

Candidate Starts for Pisa4_23:

(Start: 5 @18992 has 169 MA's), (Start: 10 @19007 has 1 MA's), (13, 19025), (15, 19037), (19, 19067), (27, 19127), (30, 19145), (41, 19259),

Gene: Pixie_23 Start: 19121, Stop: 19633, Start Num: 5

Candidate Starts for Pixie_23:

(2, 19076), (Start: 5 @19121 has 169 MA's), (12, 19148), (14, 19157), (19, 19193), (26, 19244), (27, 19253), (28, 19262), (30, 19271), (40, 19361), (50, 19511), (55, 19562), (59, 19625),

Gene: Pokerus_23 Start: 18871, Stop: 19347, Start Num: 5

Candidate Starts for Pokerus_23:

(Start: 5 @18871 has 169 MA's), (13, 18904), (15, 18916), (19, 18946), (27, 19006), (29, 19018), (30, 19024), (36, 19078), (41, 19138),

Gene: Prithvi_24 Start: 18888, Stop: 19364, Start Num: 5

Candidate Starts for Prithvi_24:

(Start: 5 @18888 has 169 MA's), (13, 18921), (15, 18933), (19, 18963), (27, 19023), (29, 19035), (30, 19041), (36, 19095), (41, 19155),

Gene: Psycho_23 Start: 19299, Stop: 19808, Start Num: 5

Candidate Starts for Psycho_23:

(Start: 5 @19299 has 169 MA's), (Start: 10 @19314 has 1 MA's), (19, 19368), (34, 19479), (41, 19581),

Gene: Qhanda_26 Start: 20430, Stop: 20948, Start Num: 3

Candidate Starts for Qhanda_26:

(Start: 3 @20430 has 22 MA's), (19, 20514), (27, 20574), (30, 20592), (38, 20664), (41, 20727), (57, 20937),

Gene: QuincyRose_23 Start: 18934, Stop: 19410, Start Num: 5

Candidate Starts for QuincyRose_23:

(Start: 5 @18934 has 169 MA's), (13, 18967), (15, 18979), (19, 19009), (27, 19069), (29, 19081), (30, 19087), (36, 19141), (41, 19201),

Gene: Ramen_24 Start: 18920, Stop: 19396, Start Num: 5

Candidate Starts for Ramen_24:

(Start: 5 @18920 has 169 MA's), (13, 18953), (15, 18965), (19, 18995), (27, 19055), (29, 19067), (30, 19073), (36, 19127), (41, 19187),

Gene: Rando14_23 Start: 17987, Stop: 18496, Start Num: 5

Candidate Starts for Rando14_23:

(Start: 5 @17987 has 169 MA's), (Start: 10 @18002 has 1 MA's), (19, 18056), (34, 18167), (38, 18206), (41, 18269), (45, 18338),

Gene: Rapunzel97_24 Start: 18921, Stop: 19397, Start Num: 5

Candidate Starts for Rapunzel97_24:

(Start: 5 @18921 has 169 MA's), (13, 18954), (15, 18966), (19, 18996), (27, 19056), (29, 19068), (30, 19074), (36, 19128), (41, 19188),

Gene: Reptar3000_25 Start: 20151, Stop: 20666, Start Num: 3

Candidate Starts for Reptar3000_25:

(Start: 3 @20151 has 22 MA's), (9, 20178), (Start: 10 @20181 has 1 MA's), (19, 20235), (21, 20256), (30, 20313), (38, 20385), (41, 20448),

Gene: Richo_24 Start: 18304, Stop: 18756, Start Num: 11

Candidate Starts for Richo_24:

(2, 18235), (Start: 5 @18280 has 169 MA's), (8, 18286), (11, 18304), (13, 18313), (15, 18325), (19, 18355), (27, 18415), (30, 18433), (41, 18547),

Gene: Rosmarinus_24 Start: 18942, Stop: 19418, Start Num: 5

Candidate Starts for Rosmarinus_24:

(Start: 5 @18942 has 169 MA's), (13, 18975), (15, 18987), (19, 19017), (27, 19077), (29, 19089), (30, 19095), (36, 19149), (41, 19209),

Gene: Ruthiejr_24 Start: 20042, Stop: 20560, Start Num: 3

Candidate Starts for Ruthiejr_24:

(Start: 3 @20042 has 22 MA's), (19, 20126), (27, 20186), (30, 20204), (38, 20276), (41, 20339), (57, 20549),

Gene: SamScheppers_23 Start: 19949, Stop: 20467, Start Num: 3

Candidate Starts for SamScheppers_23:

(Start: 3 @19949 has 22 MA's), (19, 20033), (27, 20093), (30, 20111), (38, 20183), (41, 20246), (57, 20456),

Gene: SamuelLPlaqsom_24 Start: 18868, Stop: 19344, Start Num: 5

Candidate Starts for SamuelLPlaqsom_24:

(Start: 5 @18868 has 169 MA's), (Start: 10 @18883 has 1 MA's), (13, 18901), (15, 18913), (17, 18931), (27, 19003), (29, 19015), (30, 19021), (32, 19036), (33, 19045), (36, 19075), (40, 19111), (41, 19135),

Gene: Scarlett_23 Start: 18160, Stop: 18636, Start Num: 7

Candidate Starts for Scarlett_23:

(Start: 7 @18160 has 6 MA's), (8, 18163), (13, 18190), (15, 18202), (19, 18232), (29, 18304), (30, 18310), (36, 18364), (56, 18610),

Gene: SgtBeansprout_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for SgtBeansprout_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Shadow1_22 Start: 17980, Stop: 18462, Start Num: 5

Candidate Starts for Shadow1_22:

(Start: 5 @17980 has 169 MA's), (8, 17986), (13, 18013), (15, 18025), (19, 18055), (30, 18133), (38, 18205), (41, 18247),

Gene: Shaobing_24 Start: 18280, Stop: 18756, Start Num: 5

Candidate Starts for Shaobing_24:

(2, 18235), (Start: 5 @18280 has 169 MA's), (8, 18286), (11, 18304), (13, 18313), (15, 18325), (19, 18355), (27, 18415), (30, 18433), (41, 18547),

Gene: ShedlockHolmes_23 Start: 19339, Stop: 19842, Start Num: 5

Candidate Starts for ShedlockHolmes_23:

(2, 19294), (Start: 5 @19339 has 169 MA's), (12, 19357), (14, 19366), (19, 19402), (26, 19453), (27, 19462), (28, 19471), (30, 19480), (40, 19570), (50, 19720), (55, 19771),

Gene: ShiaSurprise_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for ShiaSurprise_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: SirPhilip_23 Start: 17768, Stop: 18241, Start Num: 5

Candidate Starts for SirPhilip_23:

(Start: 5 @17768 has 169 MA's), (Start: 10 @17783 has 1 MA's), (13, 17801), (15, 17813), (19, 17843), (20, 17861), (21, 17864), (29, 17915), (30, 17921), (36, 17975), (38, 17993), (41, 18035),

Gene: Slarp_25 Start: 20421, Stop: 20939, Start Num: 3

Candidate Starts for Slarp_25:

(Start: 3 @20421 has 22 MA's), (19, 20505), (27, 20565), (30, 20583), (38, 20655), (41, 20718), (57, 20928),

Gene: Slimphazie_24 Start: 18921, Stop: 19397, Start Num: 5

Candidate Starts for Slimphazie_24:

(Start: 5 @18921 has 169 MA's), (13, 18954), (15, 18966), (19, 18996), (27, 19056), (29, 19068), (30, 19074), (36, 19128), (41, 19188),

Gene: SoSeph_22 Start: 19416, Stop: 19925, Start Num: 5

Candidate Starts for SoSeph_22:

(Start: 5 @19416 has 169 MA's), (Start: 10 @19431 has 1 MA's), (19, 19485), (34, 19596), (41, 19698),

Gene: Spock_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Spock_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Stinson_24 Start: 18887, Stop: 19363, Start Num: 5

Candidate Starts for Stinson_24:

(Start: 5 @18887 has 169 MA's), (13, 18920), (15, 18932), (17, 18950), (19, 18962), (27, 19022), (28, 19031), (29, 19034), (30, 19040), (32, 19055), (41, 19154),

Gene: Strobilo_20 Start: 16785, Stop: 17249, Start Num: 5

Candidate Starts for Strobilo_20:

(2, 16740), (Start: 5 @16785 has 169 MA's), (16, 16818), (19, 16839), (25, 16881), (27, 16899), (30, 16917), (50, 17157),

Gene: Sulley_24 Start: 18887, Stop: 19363, Start Num: 5

Candidate Starts for Sulley_24:

(Start: 5 @18887 has 169 MA's), (13, 18920), (15, 18932), (19, 18962), (27, 19022), (29, 19034), (30, 19040), (36, 19094), (41, 19154), (45, 19223),

Gene: Sunflower1121_22 Start: 17992, Stop: 18474, Start Num: 5

Candidate Starts for Sunflower1121_22:

(Start: 5 @17992 has 169 MA's), (8, 17998), (13, 18025), (15, 18037), (19, 18067), (30, 18145), (38, 18217), (41, 18259), (45, 18328),

Gene: Syra333_23 Start: 18087, Stop: 18569, Start Num: 5

Candidate Starts for Syra333_23:

(Start: 5 @18087 has 169 MA's), (8, 18093), (13, 18120), (15, 18132), (19, 18162), (30, 18240), (38, 18312), (41, 18354),

Gene: TBond007_23 Start: 19120, Stop: 19632, Start Num: 5

Candidate Starts for TBond007_23:

(2, 19075), (Start: 5 @19120 has 169 MA's), (12, 19147), (14, 19156), (19, 19192), (26, 19243), (27, 19252), (28, 19261), (30, 19270), (40, 19360), (50, 19510), (55, 19561), (59, 19624),

Gene: TClif_23 Start: 18120, Stop: 18590, Start Num: 5

Candidate Starts for TClif_23:

(Start: 5 @18120 has 169 MA's), (13, 18153), (15, 18165), (19, 18195), (27, 18255), (29, 18267), (30, 18273), (32, 18288), (36, 18327), (41, 18387),

Gene: TM4_20 Start: 16851, Stop: 17315, Start Num: 5

Candidate Starts for TM4_20:

(2, 16806), (Start: 5 @16851 has 169 MA's), (16, 16884), (19, 16905), (25, 16947), (30, 16983), (46, 17193), (50, 17223),

Gene: TPA4_21 Start: 19719, Stop: 20168, Start Num: 18

Candidate Starts for TPA4_21:

(18, 19719), (37, 19875), (39, 19893), (42, 19989), (44, 20010), (49, 20070),

Gene: Tachez_24 Start: 18883, Stop: 19359, Start Num: 5

Candidate Starts for Tachez_24:

(Start: 5 @18883 has 169 MA's), (13, 18916), (15, 18928), (19, 18958), (27, 19018), (29, 19030), (30, 19036), (36, 19090), (41, 19150),

Gene: TaiwanKao_25 Start: 18894, Stop: 19370, Start Num: 5

Candidate Starts for TaiwanKao_25:

(Start: 5 @18894 has 169 MA's), (13, 18927), (15, 18939), (19, 18969), (27, 19029), (29, 19041), (30, 19047), (36, 19101), (41, 19161),

Gene: Taquito_23 Start: 20030, Stop: 20548, Start Num: 3

Candidate Starts for Taquito_23:

(Start: 3 @20030 has 22 MA's), (19, 20114), (27, 20174), (30, 20192), (38, 20264), (41, 20327), (57, 20537),

Gene: Teejan_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Teejan_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: Thyatira_22 Start: 19268, Stop: 19777, Start Num: 5

Candidate Starts for Thyatira_22:

(Start: 5 @19268 has 169 MA's), (Start: 10 @19283 has 1 MA's), (19, 19337), (34, 19448), (41, 19550),

Gene: Tierra_23 Start: 18813, Stop: 19286, Start Num: 5

Candidate Starts for Tierra_23:

(Start: 5 @18813 has 169 MA's), (13, 18846), (15, 18858), (17, 18876), (19, 18888), (30, 18966), (36, 19020), (38, 19038), (41, 19080),

Gene: Tigress9_24 Start: 18075, Stop: 18557, Start Num: 5

Candidate Starts for Tigress9_24:

(Start: 5 @18075 has 169 MA's), (8, 18081), (13, 18108), (15, 18120), (19, 18150), (30, 18228), (38, 18300), (41, 18342),

Gene: TingHuaYa_24 Start: 18220, Stop: 18696, Start Num: 5

Candidate Starts for TingHuaYa_24:

(Start: 5 @18220 has 169 MA's), (Start: 10 @18235 has 1 MA's), (13, 18253), (15, 18265), (19, 18295), (22, 18319), (27, 18355), (29, 18367), (30, 18373), (36, 18427), (41, 18487),

Gene: TiniBug_24 Start: 18865, Stop: 19341, Start Num: 5

Candidate Starts for TiniBug_24:

(Start: 5 @18865 has 169 MA's), (Start: 10 @18880 has 1 MA's), (13, 18898), (15, 18910), (17, 18928), (27, 19000), (29, 19012), (30, 19018), (33, 19042), (36, 19072), (40, 19108), (41, 19132),

Gene: Tiri_24 Start: 18926, Stop: 19402, Start Num: 5

Candidate Starts for Tiri_24:

(Start: 5 @18926 has 169 MA's), (13, 18959), (15, 18971), (19, 19001), (27, 19061), (29, 19073), (30, 19079), (36, 19133), (41, 19193),

Gene: Topper_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Topper_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Torres_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Torres_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: TreyKay_24 Start: 18888, Stop: 19364, Start Num: 5

Candidate Starts for TreyKay_24:

(Start: 5 @18888 has 169 MA's), (13, 18921), (15, 18933), (19, 18963), (27, 19023), (29, 19035), (30, 19041), (36, 19095), (41, 19155),

Gene: TribbleTrouble_22 Start: 19166, Stop: 19669, Start Num: 5

Candidate Starts for TribbleTrouble_22:

(2, 19121), (Start: 5 @19166 has 169 MA's), (12, 19184), (14, 19193), (19, 19229), (26, 19280), (27, 19289), (28, 19298), (30, 19307), (40, 19397), (50, 19547), (58, 19640), (59, 19661),

Gene: Trice_20 Start: 18463, Stop: 18939, Start Num: 5

Candidate Starts for Trice_20:

(2, 18418), (Start: 5 @18463 has 169 MA's), (8, 18469), (11, 18487), (13, 18496), (19, 18538), (27, 18598), (30, 18616), (36, 18670), (38, 18688), (41, 18730),

Gene: TruffulaTree_24 Start: 18917, Stop: 19393, Start Num: 5

Candidate Starts for TruffulaTree_24:

(Start: 5 @18917 has 169 MA's), (13, 18950), (15, 18962), (19, 18992), (27, 19052), (29, 19064), (30, 19070), (36, 19124), (41, 19184),

Gene: Twitch_24 Start: 18954, Stop: 19430, Start Num: 5

Candidate Starts for Twitch_24:

(Start: 5 @18954 has 169 MA's), (13, 18987), (15, 18999), (19, 19029), (27, 19089), (29, 19101), (30, 19107), (36, 19161), (41, 19221),

Gene: Unicorn_23 Start: 18138, Stop: 18611, Start Num: 5

Candidate Starts for Unicorn_23:

(Start: 5 @18138 has 169 MA's), (13, 18171), (15, 18183), (17, 18201), (19, 18213), (30, 18291), (36, 18345), (38, 18363), (41, 18405), (43, 18465),

Gene: Urkel_24 Start: 18868, Stop: 19344, Start Num: 5

Candidate Starts for Urkel_24:

(Start: 5 @18868 has 169 MA's), (Start: 10 @18883 has 1 MA's), (13, 18901), (15, 18913), (17, 18931), (27, 19003), (29, 19015), (30, 19021), (32, 19036), (33, 19045), (36, 19075), (40, 19111), (41, 19135),

Gene: Validus_24 Start: 18214, Stop: 18687, Start Num: 5

Candidate Starts for Validus_24:

(2, 18169), (Start: 5 @18214 has 169 MA's), (8, 18220), (11, 18238), (13, 18247), (15, 18259), (19, 18289), (27, 18349), (30, 18367), (35, 18403), (41, 18481), (47, 18586),

Gene: Veliki_24 Start: 18957, Stop: 19433, Start Num: 5

Candidate Starts for Veliki_24:

(Start: 5 @18957 has 169 MA's), (13, 18990), (15, 19002), (19, 19032), (27, 19092), (29, 19104), (30, 19110), (36, 19164), (41, 19224),

Gene: ViviJ_21 Start: 19125, Stop: 19634, Start Num: 5

Candidate Starts for ViviJ_21:

(Start: 5 @19125 has 169 MA's), (Start: 10 @19140 has 1 MA's), (19, 19194), (34, 19305), (41, 19407), (45, 19476),

Gene: Waterfoul_22 Start: 19289, Stop: 19798, Start Num: 5

Candidate Starts for Waterfoul_22:

(Start: 5 @19289 has 169 MA's), (Start: 10 @19304 has 1 MA's), (19, 19358), (34, 19469), (41, 19571),

Gene: Wintermute_25 Start: 20410, Stop: 20928, Start Num: 3

Candidate Starts for Wintermute_25:

(Start: 3 @20410 has 22 MA's), (19, 20494), (27, 20554), (30, 20572), (38, 20644), (41, 20707), (57, 20917),

Gene: Ximenita_24 Start: 18265, Stop: 18747, Start Num: 5

Candidate Starts for Ximenita_24:

(Start: 5 @18265 has 169 MA's), (8, 18271), (13, 18298), (15, 18310), (19, 18340), (30, 18418), (38, 18490), (41, 18532), (45, 18601), (52, 18694),

Gene: Y10_25 Start: 20410, Stop: 20928, Start Num: 3

Candidate Starts for Y10_25:

(Start: 3 @20410 has 22 MA's), (19, 20494), (27, 20554), (30, 20572), (38, 20644), (41, 20707), (57, 20917),

Gene: Y2_25 Start: 20410, Stop: 20928, Start Num: 3

Candidate Starts for Y2_25:

(Start: 3 @20410 has 22 MA's), (19, 20494), (27, 20554), (30, 20572), (38, 20644), (41, 20707), (57, 20917),

Gene: YasnayaPolyana_25 Start: 20411, Stop: 20929, Start Num: 3

Candidate Starts for YasnayaPolyana_25:

(Start: 3 @20411 has 22 MA's), (19, 20495), (27, 20555), (30, 20573), (38, 20645), (41, 20708), (57, 20918),

Gene: YoureAdopted_23 Start: 18890, Stop: 19366, Start Num: 5

Candidate Starts for YoureAdopted_23:

(Start: 5 @18890 has 169 MA's), (13, 18923), (15, 18935), (19, 18965), (27, 19025), (29, 19037), (30, 19043), (36, 19097), (41, 19157),

Gene: Yuna_25 Start: 18808, Stop: 19326, Start Num: 5

Candidate Starts for Yuna_25:

(Start: 5 @18808 has 169 MA's), (13, 18841), (15, 18853), (19, 18883), (29, 18955), (30, 18961), (41, 19075), (45, 19144), (54, 19240),

Gene: Yunkel11_24 Start: 18146, Stop: 18616, Start Num: 5

Candidate Starts for Yunkel11_24:

(Start: 5 @18146 has 169 MA's), (Start: 10 @18161 has 1 MA's), (13, 18179), (15, 18191), (19, 18221), (27, 18281), (30, 18299), (36, 18353), (41, 18413),

Gene: Zabiza_24 Start: 18921, Stop: 19397, Start Num: 5

Candidate Starts for Zabiza_24:

(Start: 5 @18921 has 169 MA's), (13, 18954), (15, 18966), (19, 18996), (27, 19056), (29, 19068), (30, 19074), (36, 19128), (41, 19188),

Gene: Zavala_24 Start: 18895, Stop: 19371, Start Num: 5

Candidate Starts for Zavala_24:

(Start: 5 @18895 has 169 MA's), (13, 18928), (15, 18940), (19, 18970), (27, 19030), (29, 19042), (30, 19048), (36, 19102), (41, 19162),

Gene: ZoeJ_20 Start: 16723, Stop: 17187, Start Num: 5

Candidate Starts for ZoeJ_20:

(2, 16678), (Start: 5 @16723 has 169 MA's), (16, 16756), (19, 16777), (25, 16819), (27, 16837), (30, 16855), (50, 17095),