Pham 291308

1: Causa_142
2: StAugustine_140
3: Kepler_33 + 4
4: Melons_33
5: Coral_32 + 1
6: Antrice_35
7: Lunar_33
8: Zhuangyuan_35
9: Cygnet_32
10: PhluffyCoco_31 + 14
11: Leona_30
12: Renna12_30 + 1
13: KHumphrey_31
14: Andrew_32
15: AlexMinion_33
16: Shukran_73
17: JakeTheSnake_79
18: SpicyFrank_78
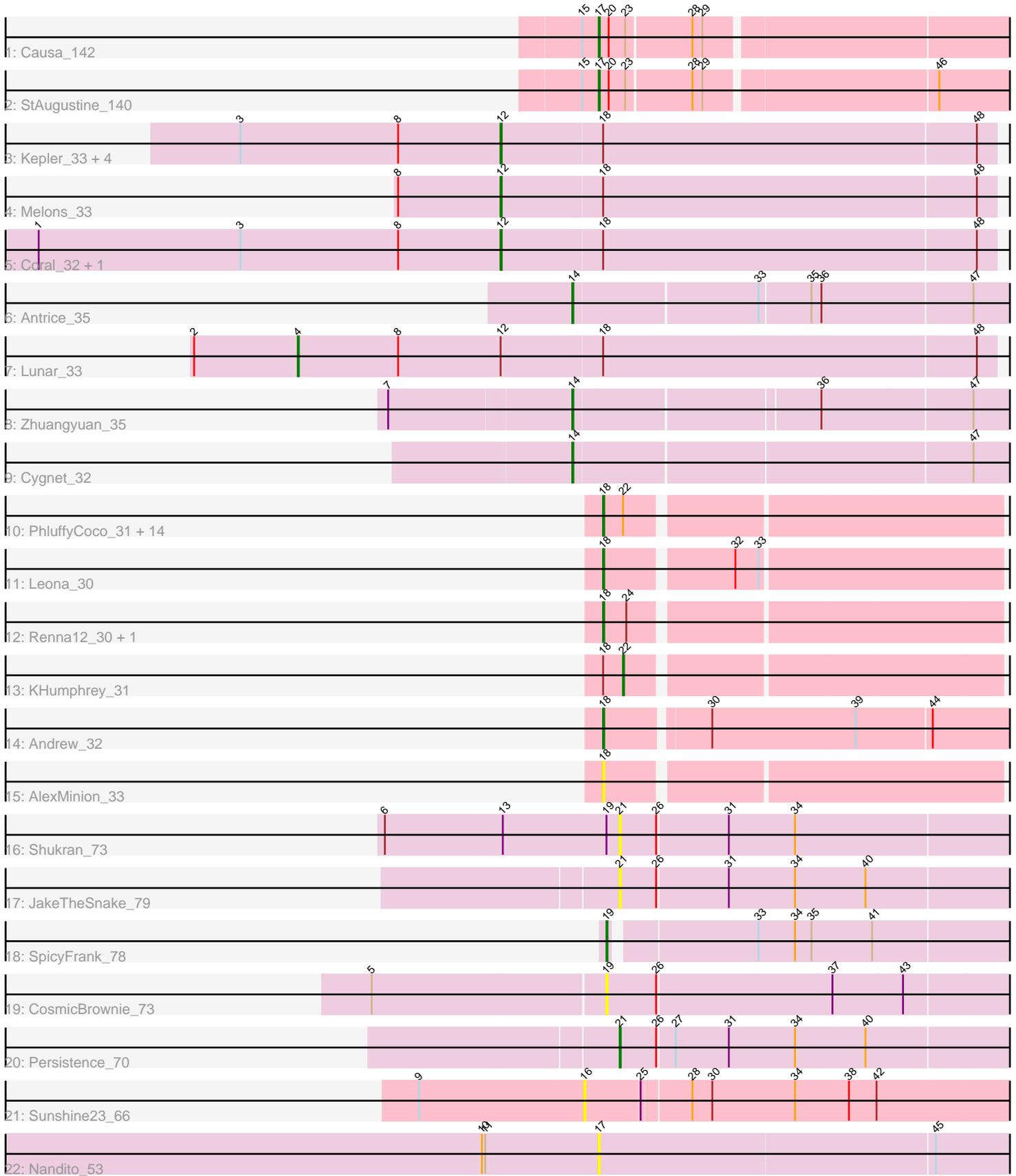19: CosmicBrownie_73
20: Persistence_70
21: Sunshine23_66
22: Nandito_53

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 291308 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291308 has 42 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Causa_142
• Track 2 : StAugustine_140
• Track 3 : Kepler_33, Amelia_33, HannahPhantana_33, Jerole_33, Daob_34
• Track 4 : Melons_33
• Track 5 : Coral_32, Cote_34
• Track 6 : Antrice_35
• Track 7 : Lunar_33
• Track 8 : Zhuangyuan_35
• Track 9 : Cygnet_32
• Track 10 : PhluffyCoco_31, Amphitrite_31, Fingolfin_31, AmiCi24_30, Atlantica_31, AdoptaAdorbs_30, Juno112_30, RedFox_31, HamCheese_31, Camara_31, Laphuphu24k_30, Glotell_32, Rattail_31, Oppalora_30, DanHam62_31
• Track 11 : Leona_30
• Track 12 : Renna12_30, Babushka_28
• Track 13 : KHumphrey_31
• Track 14 : Andrew_32
• Track 15 : AlexMinion_33
• Track 16 : Shukran_73
• Track 17 : JakeTheSnake_79
• Track 18 : SpicyFrank_78
• Track 19 : CosmicBrownie_73
• Track 20 : Persistence_70
• Track 21 : Sunshine23_66
• Track 22 : Nandito_53

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

The start number called the most often in the published annotations is 18, it was called in 12 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AdoptaAdorbs_30, AlexMinion_33, AmiCi24_30, Amphitrite_31, Andrew_32, Atlantica_31, Babushka_28, Camara_31, DanHam62_31, Fingolfin_31, Glotell_32, HamCheese_31, Juno112_30, Laphuphu24k_30, Leona_30, Oppalora_30,

PhluffyCoco_31, Rattail_31, RedFox_31, Renna12_30,

Genes that have the "Most Annotated" start but do not call it:
• Amelia_33, Coral_32, Cote_34, Daob_34, HannahPhantana_33, Jerole_33, KHumphrey_31, Kepler_33, Lunar_33, Melons_33,

Genes that do not have the "Most Annotated" start:
• Antrice_35, Causa_142, CosmicBrownie_73, Cygnet_32, JakeTheSnake_79, Nandito_53, Persistence_70, Shukran_73, SpicyFrank_78, StAugustine_140, Sunshine23_66, Zhuangyuan_35,

Summary by start number:

Start 4:
• Found in 1 of 42 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lunar_33 (AS2),

Start 12:
• Found in 9 of 42 (21.4%) of genes in pham
• Manual Annotations of this start: 8 of 29
• Called 88.9% of time when present
• Phage (with cluster) where this start called: Amelia_33 (AS2), Coral_32 (AS2), Cote_34 (AS2), Daob_34 (AS2), HannahPhantana_33 (AS2), Jerole_33 (AS2), Kepler_33 (AS2), Melons_33 (AS2),

Start 14:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 3 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antrice_35 (AS2), Cygnet_32 (AS2), Zhuangyuan_35 (AS2),

Start 16:
• Found in 1 of 42 (2.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sunshine23_66 (FG),

Start 17:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 2 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Causa_142 (AI), Nandito_53 (FH), StAugustine_140 (AI),

Start 18:
• Found in 30 of 42 (71.4%) of genes in pham
• Manual Annotations of this start: 12 of 29
• Called 66.7% of time when present
• Phage (with cluster) where this start called: AdoptaAdorbs_30 (AS3), AlexMinion_33 (AS3), AmiCi24_30 (AS3), Amphitrite_31 (AS3), Andrew_32 (AS3), Atlantica_31

(AS3), Babushka_28 (AS3), Camara_31 (AS3), DanHam62_31 (AS3), Fingolfin_31 (AS3), Glotell_32 (AS3), HamCheese_31 (AS3), Juno112_30 (AS3), Laphuphu24k_30 (AS3), Leona_30 (AS3), Oppalora_30 (AS3), PhluffyCoco_31 (AS3), Rattail_31 (AS3), RedFox_31 (AS3), Renna12_30 (AS3),

Start 19:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 66.7% of time when present
• Phage (with cluster) where this start called: CosmicBrownie_73 (AY), SpicyFrank_78 (AY),

Start 21:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JakeTheSnake_79 (AY), Persistence_70 (AY), Shukran_73 (AY),

Start 22:
• Found in 16 of 42 (38.1%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 6.2% of time when present
• Phage (with cluster) where this start called: KHumphrey_31 (AS3),

Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, AI, FH, FG, AY,

Info for manual annotations of cluster AI:
•Start number 17 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster AS2:
•Start number 4 was manually annotated 1 time for cluster AS2.
•Start number 12 was manually annotated 8 times for cluster AS2.
•Start number 14 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 18 was manually annotated 12 times for cluster AS3.
•Start number 22 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:
•Start number 19 was manually annotated 1 time for cluster AY.
•Start number 21 was manually annotated 1 time for cluster AY.

Gene Information:

Gene: AdoptaAdorbs_30 Start: 21209, Stop: 20868, Start Num: 18
Candidate Starts for AdoptaAdorbs_30:

(Start: 18 @21209 has 12 MA's), (Start: 22 @21191 has 1 MA's),

Gene: AlexMinion_33 Start: 21398, Stop: 21057, Start Num: 18
Candidate Starts for AlexMinion_33:
(Start: 18 @21398 has 12 MA's),

Gene: Amelia_33 Start: 21955, Stop: 21515, Start Num: 12
Candidate Starts for Amelia_33:
(3, 22189), (8, 22048), (Start: 12 @21955 has 8 MA's), (Start: 18 @21865 has 12 MA's), (48, 21532),

Gene: AmiCi24_30 Start: 21208, Stop: 20867, Start Num: 18
Candidate Starts for AmiCi24_30:
(Start: 18 @21208 has 12 MA's), (Start: 22 @21190 has 1 MA's),

Gene: Amphitrite_31 Start: 21207, Stop: 20866, Start Num: 18
Candidate Starts for Amphitrite_31:
(Start: 18 @21207 has 12 MA's), (Start: 22 @21189 has 1 MA's),

Gene: Andrew_32 Start: 21174, Stop: 20812, Start Num: 18
Candidate Starts for Andrew_32:
(Start: 18 @21174 has 12 MA's), (30, 21087), (39, 20958), (44, 20892),

Gene: Antrice_35 Start: 22982, Stop: 22596, Start Num: 14
Candidate Starts for Antrice_35:
(Start: 14 @22982 has 3 MA's), (33, 22820), (35, 22775), (36, 22766), (47, 22634),

Gene: Atlantica_31 Start: 21209, Stop: 20868, Start Num: 18
Candidate Starts for Atlantica_31:
(Start: 18 @21209 has 12 MA's), (Start: 22 @21191 has 1 MA's),

Gene: Babushka_28 Start: 21123, Stop: 20782, Start Num: 18
Candidate Starts for Babushka_28:
(Start: 18 @21123 has 12 MA's), (24, 21102),

Gene: Camara_31 Start: 21210, Stop: 20869, Start Num: 18
Candidate Starts for Camara_31:
(Start: 18 @21210 has 12 MA's), (Start: 22 @21192 has 1 MA's),

Gene: Causa_142 Start: 83302, Stop: 82940, Start Num: 17
Candidate Starts for Causa_142:
(15, 83317), (Start: 17 @83302 has 2 MA's), (20, 83293), (23, 83278), (28, 83221), (29, 83212),

Gene: Coral_32 Start: 21794, Stop: 21354, Start Num: 12
Candidate Starts for Coral_32:
(1, 22211), (3, 22028), (8, 21887), (Start: 12 @21794 has 8 MA's), (Start: 18 @21704 has 12 MA's), (48, 21371),

Gene: CosmicBrownie_73 Start: 41072, Stop: 41473, Start Num: 19
Candidate Starts for CosmicBrownie_73:
(5, 40865), (Start: 19 @41072 has 1 MA's), (26, 41117), (37, 41273), (43, 41336),

Gene: Cote_34 Start: 22271, Stop: 21831, Start Num: 12
Candidate Starts for Cote_34:

(1, 22688), (3, 22505), (8, 22364), (Start: 12 @22271 has 8 MA's), (Start: 18 @22181 has 12 MA's), (48, 21848),

Gene: Cygnet_32 Start: 22555, Stop: 22169, Start Num: 14
Candidate Starts for Cygnet_32:
(Start: 14 @22555 has 3 MA's), (47, 22207),

Gene: DanHam62_31 Start: 21209, Stop: 20868, Start Num: 18
Candidate Starts for DanHam62_31:
(Start: 18 @21209 has 12 MA's), (Start: 22 @21191 has 1 MA's),

Gene: Daob_34 Start: 22289, Stop: 21849, Start Num: 12
Candidate Starts for Daob_34:
(3, 22523), (8, 22382), (Start: 12 @22289 has 8 MA's), (Start: 18 @22199 has 12 MA's), (48, 21866),

Gene: Fingolfin_31 Start: 21210, Stop: 20869, Start Num: 18
Candidate Starts for Fingolfin_31:
(Start: 18 @21210 has 12 MA's), (Start: 22 @21192 has 1 MA's),

Gene: Glotell_32 Start: 21366, Stop: 21025, Start Num: 18
Candidate Starts for Glotell_32:
(Start: 18 @21366 has 12 MA's), (Start: 22 @21348 has 1 MA's),

Gene: HamCheese_31 Start: 21194, Stop: 20853, Start Num: 18
Candidate Starts for HamCheese_31:
(Start: 18 @21194 has 12 MA's), (Start: 22 @21176 has 1 MA's),

Gene: HannahPhantana_33 Start: 21951, Stop: 21511, Start Num: 12
Candidate Starts for HannahPhantana_33:
(3, 22185), (8, 22044), (Start: 12 @21951 has 8 MA's), (Start: 18 @21861 has 12 MA's), (48, 21528),

Gene: JakeTheSnake_79 Start: 44784, Stop: 45149, Start Num: 21
Candidate Starts for JakeTheSnake_79:
(Start: 21 @44784 has 1 MA's), (26, 44817), (31, 44880), (34, 44940), (40, 45003),

Gene: Jerole_33 Start: 22074, Stop: 21634, Start Num: 12
Candidate Starts for Jerole_33:
(3, 22308), (8, 22167), (Start: 12 @22074 has 8 MA's), (Start: 18 @21984 has 12 MA's), (48, 21651),

Gene: Juno112_30 Start: 21210, Stop: 20869, Start Num: 18
Candidate Starts for Juno112_30:
(Start: 18 @21210 has 12 MA's), (Start: 22 @21192 has 1 MA's),

Gene: KHumphrey_31 Start: 21190, Stop: 20867, Start Num: 22
Candidate Starts for KHumphrey_31:
(Start: 18 @21208 has 12 MA's), (Start: 22 @21190 has 1 MA's),

Gene: Kepler_33 Start: 22238, Stop: 21798, Start Num: 12
Candidate Starts for Kepler_33:
(3, 22472), (8, 22331), (Start: 12 @22238 has 8 MA's), (Start: 18 @22148 has 12 MA's), (48, 21815),

Gene: Laphuphu24k_30 Start: 21194, Stop: 20853, Start Num: 18
Candidate Starts for Laphuphu24k_30:

(Start: 18 @21194 has 12 MA's), (Start: 22 @21176 has 1 MA's),

Gene: Leona_30 Start: 21281, Stop: 20940, Start Num: 18
Candidate Starts for Leona_30:
(Start: 18 @21281 has 12 MA's), (32, 21173), (33, 21152),

Gene: Lunar_33 Start: 22122, Stop: 21499, Start Num: 4
Candidate Starts for Lunar_33:
(2, 22215), (Start: 4 @22122 has 1 MA's), (8, 22032), (Start: 12 @21939 has 8 MA's), (Start: 18 @21849 has 12 MA's), (48, 21516),

Gene: Melons_33 Start: 21939, Stop: 21499, Start Num: 12
Candidate Starts for Melons_33:
(8, 22032), (Start: 12 @21939 has 8 MA's), (Start: 18 @21849 has 12 MA's), (48, 21516),

Gene: Nandito_53 Start: 37649, Stop: 38023, Start Num: 17
Candidate Starts for Nandito_53:
(10, 37544), (11, 37547), (Start: 17 @37649 has 2 MA's), (45, 37946),

Gene: Oppalora_30 Start: 21208, Stop: 20867, Start Num: 18
Candidate Starts for Oppalora_30:
(Start: 18 @21208 has 12 MA's), (Start: 22 @21190 has 1 MA's),

Gene: Persistence_70 Start: 40343, Stop: 40708, Start Num: 21
Candidate Starts for Persistence_70:
(Start: 21 @40343 has 1 MA's), (26, 40376), (27, 40391), (31, 40439), (34, 40499), (40, 40562),

Gene: PhluffyCoco_31 Start: 21194, Stop: 20853, Start Num: 18
Candidate Starts for PhluffyCoco_31:
(Start: 18 @21194 has 12 MA's), (Start: 22 @21176 has 1 MA's),

Gene: Rattail_31 Start: 21290, Stop: 20949, Start Num: 18
Candidate Starts for Rattail_31:
(Start: 18 @21290 has 12 MA's), (Start: 22 @21272 has 1 MA's),

Gene: RedFox_31 Start: 21207, Stop: 20866, Start Num: 18
Candidate Starts for RedFox_31:
(Start: 18 @21207 has 12 MA's), (Start: 22 @21189 has 1 MA's),

Gene: Renna12_30 Start: 21228, Stop: 20887, Start Num: 18
Candidate Starts for Renna12_30:
(Start: 18 @21228 has 12 MA's), (24, 21207),

Gene: Shukran_73 Start: 41223, Stop: 41588, Start Num: 21
Candidate Starts for Shukran_73:
(6, 41013), (13, 41118), (Start: 19 @41211 has 1 MA's), (Start: 21 @41223 has 1 MA's), (26, 41256), (31, 41319), (34, 41379),

Gene: SpicyFrank_78 Start: 42043, Stop: 42432, Start Num: 19
Candidate Starts for SpicyFrank_78:
(Start: 19 @42043 has 1 MA's), (33, 42166), (34, 42199), (35, 42214), (41, 42268),

Gene: StAugustine_140 Start: 84499, Stop: 84137, Start Num: 17

Candidate Starts for StAugustine_140:
(15, 84514), (Start: 17 @84499 has 2 MA's), (20, 84490), (23, 84475), (28, 84418), (29, 84409), (46, 84211),

Gene: Sunshine23_66 Start: 44762, Stop: 45172, Start Num: 16
Candidate Starts for Sunshine23_66:
(9, 44612), (16, 44762), (25, 44810), (28, 44852), (30, 44870), (34, 44945), (38, 44993), (42, 45017),

Gene: Zhuangyuan_35 Start: 22960, Stop: 22577, Start Num: 14
Candidate Starts for Zhuangyuan_35:
(7, 23122), (Start: 14 @22960 has 3 MA's), (36, 22747), (47, 22615),