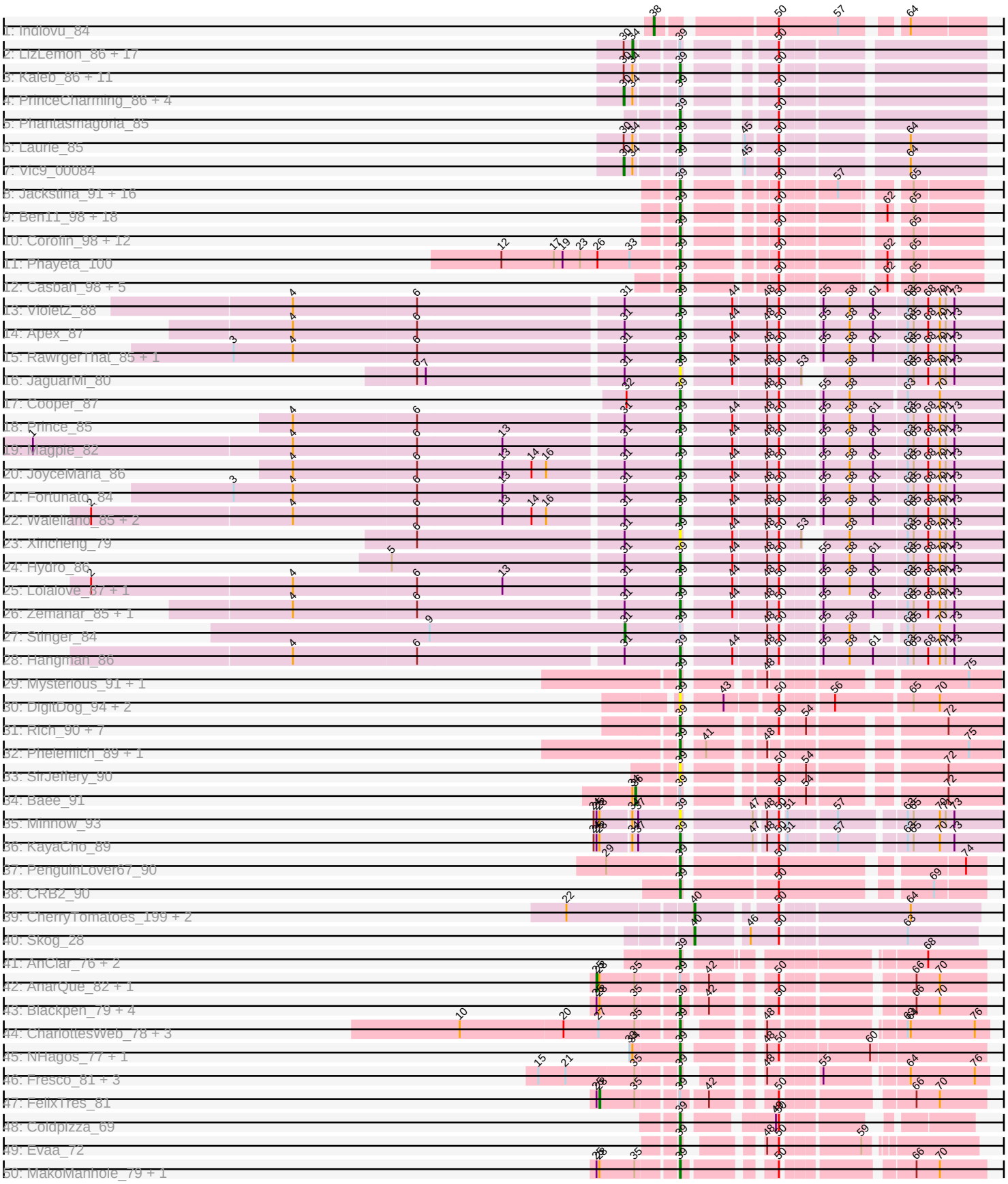
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1: Indiovu_84
2: LizLemon_86 + 17
3: Kaleb_86 + 11
4: PrinceCharming_86 + 4
5: Phantasmagoria_85
6: Laurie_85
7: Vic9_00084
8: Jackstina_91 + 16
9: Ben11_98 + 18
10: Corofin_98 + 12
11: Phayeta_100
12: Casban_98 + 5
13: VioletZ_88
14: Apex_87
15: RawrgerThat_85 + 1
16: JaguarMI_80
17: Cooper_87
18: Prince_85
19: Magpie_82
20: JoyceMaria_86
21: Fortunato_84
22: Waleiland_85 + 2
23: Xincheng_79
24: Hydro_86
25: Lolalove_87 + 1
26: Zemanar_85 + 1
27: Stinger_84
28: Hangman_86
29: Mysterious_91 + 1
30: DigitDog_94 + 2
31: Rich_90 + 7
32: Phelemich_89 + 1
33: SirJeffery_90
34: Baee_91
35: Minnow_93
36: KayaCho_89
37: PenguinLover67_90
38: CRB2_90
39: CherryTomatoes_199 + 2
40: Skog_28
41: AnClar_76 + 2
42: AnarQue_82 + 1
43: Blackpen_79 + 4
44: CharlottesWeb_78 + 3
45: NHagos_77 + 1
46: Fresco_81 + 3
47: FelixTres_81
48: Coldpizza_69
49: Evaa_72
50: MakoManhole_79 + 1

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51: BiggityBass_79
52: LittleMunchkin_80
53: Sour_75
54: BobRoss2024_59
39
8
11
39
52
68
76
39
48
50
53
62
76

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 347312 Report

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

Pham number 347312 has 170 members, 20 are drafts.

Phages represented in each track:
• Track 1 : Indlovu_84
• Track 2 : LizLemon_86, Sabella_86, Godines_86, Arbiter_83, Glass_88, Qyrzula_77, Kheth_86, Ares_86, ItsyBitsy1_83, FrenchFry_87, MasterPo_87, Tinciduntsolum_87, Lephleur_86, Hedgerow_86, Holeinone_86, TA17A_89, Brownie5_86, Blocker23_86
• Track 3 : Kaleb_86, Rhinoforte_86, Allegro_86, Kolhan_87, Boyle_86, Eaglehorse_87, Calamitous_87, Faze9_85, Coffee_85, Lars_87, West99_86, Rosebush_84
• Track 4 : PrinceCharming_86, LilSmirk_86, Opia_87, Bananafish_87, Tres_86
• Track 5 : Phantasmagoria_85
• Track 6 : Laurie_85
• Track 7 : Vic9_00084
• Track 8 : Jackstina_91, Tydolla_94, Halfpint_97, SynergyX_99, Chandler_98, RagingRooster_98, GlenHope_99, Heathcliff_98, Baloo_97, Morty007_96, Devonte_96, Deenasa_99, Yahalom_96, Daisy_97, Pipefish_97, Compostia_97, Marley1013_96
• Track 9 : Ben11_98, Kamiyu_98, Gervas_99, Akoma_99, Yinz_96, Philly_97, Mulaychimus_99, Audrey_98, Rita1961_99, Gadjet_97, Glubnar_98, Bernardo_95, SwainyDoc_98, MmasiCarm_99, Athena_100, Chentzyk_100, RomaT_98, Phaedrus_93, Marlia_98
• Track 10 : Corofin_98, Neos5_97, OrangeOswald_97, SlippinJimmy_101, Phlyer_98, HarveySr_95, LestyG_96, Briakila_99, Chalmers_98, Shenandoah_98, Abinghost_98, Nozo_98, ChaChing_98
• Track 11 : Phayeta_100
• Track 12 : Casbah_98, TinyTerror_99, Kronus_98, Obutu_100, Olivio_98, Mortcellus_98
• Track 13 : VioletZ_88
• Track 14 : Apex_87
• Track 15 : RawrgerThat_85, Mithril_85
• Track 16 : JaguarMi_80
• Track 17 : Cooper_87
• Track 18 : Prince_85
• Track 19 : Magpie_82
• Track 20 : JoyceMaria_86
• Track 21 : Fortunato_84
• Track 22 : Waleliano_85, Mudslide_86, BrownCNA_87
• Track 23 : Xincheng_79

• Track 24 : Hydro_86
• Track 25 : Lolalove_87, Fanaw_81
• Track 26 : Zemanar_85, Frederick_87
• Track 27 : Stinger_84
• Track 28 : Hangman_86
• Track 29 : Mysterious_91, Nehemiah_91
• Track 30 : DigitDog_94, Shenyu_93, Nangang_93
• Track 31 : Rich_90, Serendipitous_93, Rita130_91, Donny_92, EastView9101_92, Acadian_92, Suigeneris_93, Reccee_93
• Track 32 : Phelemich_89, Reprobate_91
• Track 33 : SirJeffery_90
• Track 34 : Baee_91
• Track 35 : Minnow_93
• Track 36 : KayaCho_89
• Track 37 : PenguinLover67_90
• Track 38 : CRB2_90
• Track 39 : CherryTomatoes_199, Pupper_197, SCentae_196
• Track 40 : Skog_28
• Track 41 : AnClar_76, Yago84_78, Sisko_79
• Track 42 : AnarQue_82, CloverMinnie_80
• Track 43 : Blackpen_79, Yeshua_81, CaiB_81, Wooper_82, MossRose_80
• Track 44 : CharlottesWeb_78, Coco2012_77, Mariokart_78, JellyBelly_77
• Track 45 : NHagos_77, AksarBAT_81
• Track 46 : Fresco_81, Axumite_81, Shatter_81, Ligma_81
• Track 47 : FelixTres_81
• Track 48 : Coldpizza_69
• Track 49 : Evaa_72
• Track 50 : MakoManhole_79, TraderJ_81
• Track 51 : BiggityBass_79
• Track 52 : LittleMunchkin_80
• Track 53 : Sour_75
• Track 54 : BobRoss2024_59

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

The start number called the most often in the published annotations is 39, it was called in 117 of the 150 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abinghost_98, Acadian_92, Akoma_99, AksarBAT_81, Allegro_86, AnClar_76, Apex_87, Athena_100, Audrey_98, Axumite_81, Baloo_97, Ben11_98, Bernardo_95, BiggityBass_79, Blackpen_79, BobRoss2024_59, Boyle_86, Briakila_99, BrownCNA_87, CRB2_90, CaiB_81, Calamitous_87, Casbah_98, ChaChing_98, Chalmers_98, Chandler_98, CharlottesWeb_78, Chentzyk_100, Coco2012_77, Coffee_85, Coldpizza_69, Compostia_97, Cooper_87, Corofin_98, Daisy_97, Deenasa_99, Devonte_96, DigitDog_94, Donny_92, Eaglehorse_87, EastView9101_92, Evaa_72, Fanaw_81, Faze9_85, Fortunato_84, Frederick_87, Fresco_81, Gadjet_97, Gervas_99, GlenHope_99, Glubnar_98, Halfpint_97, Hangman_86, HarveySr_95, Heathcliff_98, Hydro_86, Jackstina_91, JaguarMi_80, JellyBelly_77, JoyceMaria_86, Kaleb_86, Kamiyu_98, KayaCho_89, Kolhan_87,

Kronus_98, Lars_87, Laurie_85, LestyG_96, Ligma_81, LittleMunchkin_80, Lolalove_87, Magpie_82, MakoManhole_79, Mariokart_78, Marley1013_96, Marlia_98, Minnow_93, Mithril_85, MmasiCarm_99, Mortcellus_98, Morty007_96, MossRose_80, Mudslide_86, Mulaychimus_99, Mysterious_91, NHagos_77, Nangang_93, Nehemiah_91, Neos5_97, Nozo_98, Obutu_100, Olivio_98, OrangeOswald_97, PenguinLover67_90, Phaedrus_93, Phantasmagoria_85, Phayeta_100, Phelemich_89, Philly_97, Phlyer_98, Pipefish_97, Prince_85, RagingRooster_98, RawrgerThat_85, Reccee_93, Reprobate_91, Rhinoforte_86, Rich_90, Rita130_91, Rita1961_99, RomaT_98, Rosebush_84, Serendipitous_93, Shatter_81, Shenandoah_98, Shenyu_93, SirJeffery_90, Sisko_79, SlippinJimmy_101, Sour_75, Suigeneris_93, SwainyDoc_98, SynergyX_99, TinyTerror_99, TraderJ_81, Tydolla_94, VioletZ_88, Waleliano_85, West99_86, Wooper_82, Xincheng_79, Yago84_78, Yahalom_96, Yeshua_81, Yinz_96, Zemanar_85,

Genes that have the "Most Annotated" start but do not call it:
• AnarQue_82, Arbiter_83, Ares_86, Baee_91, Bananafish_87, Blocker23_86, Brownie5_86, CloverMinnie_80, FelixTres_81, FrenchFry_87, Glass_88, Godines_86, Hedgerow_86, Holeinone_86, ItsyBitsy1_83, Kheth_86, Lephleur_86, LilSmirk_86, LizLemon_86, MasterPo_87, Opia_87, PrinceCharming_86, Qyrzula_77, Sabella_86, Stinger_84, TA17A_89, Tinciduntsolum_87, Tres_86, Vic9_00084,

Genes that do not have the "Most Annotated" start:
• CherryTomatoes_199, Indlovu_84, Pupper_197, SCentae_196, Skog_28,

Summary by start number:

Start 25:
• Found in 12 of 170 (7.1%) of genes in pham
• Manual Annotations of this start: 2 of 150
• Called 16.7% of time when present
• Phage (with cluster) where this start called: AnarQue_82 (DR), CloverMinnie_80 (DR),

Start 28:
• Found in 12 of 170 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 8.3% of time when present
• Phage (with cluster) where this start called: FelixTres_81 (DR),

Start 30:
• Found in 37 of 170 (21.8%) of genes in pham
• Manual Annotations of this start: 5 of 150
• Called 16.2% of time when present
• Phage (with cluster) where this start called: Bananafish_87 (B2), LilSmirk_86 (B2), Opia_87 (B2), PrinceCharming_86 (B2), Tres_86 (B2), Vic9_00084 (B2),

Start 31:
• Found in 20 of 170 (11.8%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 5.0% of time when present
• Phage (with cluster) where this start called: Stinger_84 (B4),

Start 34:
• Found in 43 of 170 (25.3%) of genes in pham
• Manual Annotations of this start: 18 of 150
• Called 41.9% of time when present
• Phage (with cluster) where this start called: Arbiter_83 (B2), Ares_86 (B2), Blocker23_86 (B2), Brownie5_86 (B2), FrenchFry_87 (B2), Glass_88 (B2), Godines_86 (B2), Hedgerow_86 (B2), Holeinone_86 (B2), ItsyBitsy1_83 (B2), Kheth_86 (B2), Lephleur_86 (B2), LizLemon_86 (B2), MasterPo_87 (B2), Qyrzula_77 (B2), Sabella_86 (B2), TA17A_89 (B2), Tinciduntsolum_87 (B2),

Start 36:
• Found in 2 of 170 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Baee_91 (B5),

Start 38:
• Found in 1 of 170 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlovu_84 (B11),

Start 39:
• Found in 165 of 170 (97.1%) of genes in pham
• Manual Annotations of this start: 117 of 150
• Called 82.4% of time when present
• Phage (with cluster) where this start called: Abinghost_98 (B3), Acadian_92 (B5), Akoma_99 (B3), AksarBAT_81 (DR), Allegro_86 (B2), AnClar_76 (DR), Apex_87 (B4), Athena_100 (B3), Audrey_98 (B3), Axumite_81 (DR), Baloo_97 (B3), Ben11_98 (B3), Bernardo_95 (B3), BiggityBass_79 (DR), Blackpen_79 (DR), BobRoss2024_59 (DR), Boyle_86 (B2), Briakila_99 (B3), BrownCNA_87 (B4), CRB2_90 (B9), CaiB_81 (DR), Calamitous_87 (B2), Casbah_98 (B3), ChaChing_98 (B3), Chalmers_98 (B3), Chandler_98 (B3), CharlottesWeb_78 (DR), Chentzyk_100 (B3), Coco2012_77 (DR), Coffee_85 (B2), Coldpizza_69 (DR), Compostia_97 (B3), Cooper_87 (B4), Corofin_98 (B3), Daisy_97 (B3), Deenasa_99 (B3), Devonte_96 (B3), DigitDog_94 (B5), Donny_92 (B5), Eaglehorse_87 (B2), EastView9101_92 (B5), Evaa_72 (DR), Fanaw_81 (B4), Faze9_85 (B2), Fortunato_84 (B4), Frederick_87 (B4), Fresco_81 (DR), Gadjet_97 (B3), Gervas_99 (B3), GlenHope_99 (B3), Glubnar_98 (B3), Halfpint_97 (B3), Hangman_86 (B4), HarveySr_95 (B3), Heathcliff_98 (B3), Hydro_86 (B4), Jackstina_91 (B3), JaguarMi_80 (B4), JellyBelly_77 (DR), JoyceMaria_86 (B4), Kaleb_86 (B2), Kamiyu_98 (B3), KayaCho_89 (B6), Kolhan_87 (B2), Kronus_98 (B3), Lars_87 (B2), Laurie_85 (B2), LestyG_96 (B3), Ligma_81 (DR), LittleMunchkin_80 (DR), Lolalove_87 (B4), Magpie_82 (B4), MakoManhole_79 (DR), Mariokart_78 (DR), Marley1013_96 (B3), Marlia_98 (B3), Minnow_93 (B6), Mithril_85 (B4), MmasiCarm_99 (B3), Mortcellus_98 (B3), Morty007_96 (B3), MossRose_80 (DR), Mudslide_86 (B4), Mulaychimus_99 (B3), Mysterious_91 (B5), NHagos_77 (DR), Nangang_93 (B5), Nehemiah_91 (B5), Neos5_97 (B3), Nozo_98 (B3), Obutu_100 (B3), Olivio_98 (B3), OrangeOswald_97 (B3), PenguinLover67_90 (B9), Phaedrus_93 (B3), Phantasmagoria_85 (B2), Phayeta_100 (B3), Phelemich_89 (B5), Philly_97 (B3), Phlyer_98 (B3), Pipefish_97 (B3), Prince_85 (B4), RagingRooster_98 (B3), RawrgerThat_85 (B4), Reccee_93 (B5), Reprobate_91 (B5), Rhinoforte_86 (B2), Rich_90 (B5), Rita130_91 (B5), Rita1961_99 (B3), RomaT_98 (B3), Rosebush_84 (B2), Serendipitous_93 (B5), Shatter_81 (DR), Shenandoah_98 (B3), Shenyu_93

(B5), SirJeffery_90 (B5), Sisko_79 (DR), SlippinJimmy_101 (B3), Sour_75 (DR), Suigeneris_93 (B5), SwainyDoc_98 (B3), SynergyX_99 (B3), TinyTerror_99 (B3), TraderJ_81 (DR), Tydolla_94 (B3), VioletZ_88 (B4), Waleliano_85 (B4), West99_86 (B2), Wooper_82 (DR), Xincheng_79 (B4), Yago84_78 (DR), Yahalom_96 (B3), Yeshua_81 (DR), Yinz_96 (B3), Zemanar_85 (B4),

Start 40:
• Found in 4 of 170 (2.4%) of genes in pham
• Manual Annotations of this start: 4 of 150
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_199 (DO), Pupper_197 (DO), SCentae_196 (DO), Skog_28 (DO),

Summary by clusters:

There are 9 clusters represented in this pham: DO, B11, B4, B5, B6, B2, B3, DR, B9,

Info for manual annotations of cluster B11:
•Start number 38 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B2:
•Start number 30 was manually annotated 5 times for cluster B2.
•Start number 34 was manually annotated 18 times for cluster B2.
•Start number 39 was manually annotated 14 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 39 was manually annotated 53 times for cluster B3.

Info for manual annotations of cluster B4:
•Start number 31 was manually annotated 1 time for cluster B4.
•Start number 39 was manually annotated 17 times for cluster B4.

Info for manual annotations of cluster B5:
•Start number 36 was manually annotated 1 time for cluster B5.
•Start number 39 was manually annotated 10 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 39 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B9:
•Start number 39 was manually annotated 2 times for cluster B9.

Info for manual annotations of cluster DO:
•Start number 40 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DR:
•Start number 25 was manually annotated 2 times for cluster DR.
•Start number 28 was manually annotated 1 time for cluster DR.
•Start number 39 was manually annotated 20 times for cluster DR.

Gene Information:

Gene: Abinghost_98 Start: 67232, Stop: 66996, Start Num: 39
Candidate Starts for Abinghost_98:
(Start: 39 @67232 has 117 MA's), (50, 67163), (65, 67064),

Gene: Acadian_92 Start: 67740, Stop: 67471, Start Num: 39
Candidate Starts for Acadian_92:
(Start: 39 @67740 has 117 MA's), (50, 67665), (54, 67647), (72, 67527),

Gene: Akoma_99 Start: 67309, Stop: 67073, Start Num: 39
Candidate Starts for Akoma_99:
(Start: 39 @67309 has 117 MA's), (50, 67240), (62, 67159), (65, 67141),

Gene: AksarBAT_81 Start: 59268, Stop: 59008, Start Num: 39
Candidate Starts for AksarBAT_81:
(33, 59316), (Start: 34 @59313 has 18 MA's), (Start: 39 @59268 has 117 MA's), (48, 59211), (50, 59199), (60, 59121),

Gene: Allegro_86 Start: 65189, Stop: 64932, Start Num: 39
Candidate Starts for Allegro_86:
(Start: 30 @65234 has 5 MA's), (Start: 34 @65225 has 18 MA's), (Start: 39 @65189 has 117 MA's), (50, 65120),

Gene: AnClar_76 Start: 59906, Stop: 59643, Start Num: 39
Candidate Starts for AnClar_76:
(Start: 39 @59906 has 117 MA's), (68, 59702),

Gene: AnarQue_82 Start: 60514, Stop: 60182, Start Num: 25
Candidate Starts for AnarQue_82:
(Start: 25 @60514 has 2 MA's), (Start: 28 @60511 has 1 MA's), (35, 60475), (Start: 39 @60439 has 117 MA's), (42, 60415), (50, 60364), (66, 60253), (70, 60229),

Gene: Apex_87 Start: 66047, Stop: 65745, Start Num: 39
Candidate Starts for Apex_87:
(4, 66434), (6, 66308), (Start: 31 @66104 has 1 MA's), (Start: 39 @66047 has 117 MA's), (44, 66005), (48, 65972), (50, 65960), (55, 65930), (58, 65903), (61, 65879), (63, 65846), (65, 65840), (68, 65825), (70, 65813), (71, 65807), (73, 65798),

Gene: Arbiter_83 Start: 65266, Stop: 64973, Start Num: 34
Candidate Starts for Arbiter_83:
(Start: 30 @65275 has 5 MA's), (Start: 34 @65266 has 18 MA's), (Start: 39 @65230 has 117 MA's), (50, 65161),

Gene: Ares_86 Start: 65225, Stop: 64932, Start Num: 34
Candidate Starts for Ares_86:
(Start: 30 @65234 has 5 MA's), (Start: 34 @65225 has 18 MA's), (Start: 39 @65189 has 117 MA's), (50, 65120),

Gene: Athena_100 Start: 68005, Stop: 67769, Start Num: 39
Candidate Starts for Athena_100:
(Start: 39 @68005 has 117 MA's), (50, 67936), (62, 67855), (65, 67837),

Gene: Audrey_98 Start: 67259, Stop: 67023, Start Num: 39
Candidate Starts for Audrey_98:

(Start: 39 @67259 has 117 MA's), (50, 67190), (62, 67109), (65, 67091),

Gene: Axumite_81 Start: 59787, Stop: 59539, Start Num: 39
Candidate Starts for Axumite_81:
(15, 59919), (21, 59892), (35, 59823), (Start: 39 @59787 has 117 MA's), (48, 59736), (55, 59694), (64, 59619), (76, 59553),

Gene: Baee_91 Start: 68280, Stop: 67975, Start Num: 36
Candidate Starts for Baee_91:
(Start: 34 @68283 has 18 MA's), (Start: 36 @68280 has 1 MA's), (Start: 39 @68244 has 117 MA's), (50, 68169), (54, 68151), (72, 68031),

Gene: Baloo_97 Start: 67112, Stop: 66876, Start Num: 39
Candidate Starts for Baloo_97:
(Start: 39 @67112 has 117 MA's), (50, 67043), (57, 66998), (65, 66944),

Gene: Bananafish_87 Start: 65171, Stop: 64869, Start Num: 30
Candidate Starts for Bananafish_87:
(Start: 30 @65171 has 5 MA's), (Start: 34 @65162 has 18 MA's), (Start: 39 @65126 has 117 MA's), (50, 65057),

Gene: Ben11_98 Start: 67489, Stop: 67253, Start Num: 39
Candidate Starts for Ben11_98:
(Start: 39 @67489 has 117 MA's), (50, 67420), (62, 67339), (65, 67321),

Gene: Bernardo_95 Start: 66783, Stop: 66547, Start Num: 39
Candidate Starts for Bernardo_95:
(Start: 39 @66783 has 117 MA's), (50, 66714), (62, 66633), (65, 66615),

Gene: BiggityBass_79 Start: 61390, Stop: 61115, Start Num: 39
Candidate Starts for BiggityBass_79:
(Start: 39 @61390 has 117 MA's),

Gene: Blackpen_79 Start: 58903, Stop: 58646, Start Num: 39
Candidate Starts for Blackpen_79:
(Start: 25 @58978 has 2 MA's), (Start: 28 @58975 has 1 MA's), (35, 58939), (Start: 39 @58903 has 117 MA's), (42, 58879), (50, 58828), (66, 58717), (70, 58693),

Gene: Blocker23_86 Start: 65227, Stop: 64934, Start Num: 34
Candidate Starts for Blocker23_86:
(Start: 30 @65236 has 5 MA's), (Start: 34 @65227 has 18 MA's), (Start: 39 @65191 has 117 MA's), (50, 65122),

Gene: BobRoss2024_59 Start: 49011, Stop: 48754, Start Num: 39
Candidate Starts for BobRoss2024_59:
(33, 49053), (Start: 34 @49050 has 18 MA's), (Start: 36 @49047 has 1 MA's), (Start: 39 @49011 has 117 MA's), (48, 48960), (50, 48948), (62, 48852),

Gene: Boyle_86 Start: 65238, Stop: 64981, Start Num: 39
Candidate Starts for Boyle_86:
(Start: 30 @65283 has 5 MA's), (Start: 34 @65274 has 18 MA's), (Start: 39 @65238 has 117 MA's), (50, 65169),

Gene: Briakila_99 Start: 67763, Stop: 67527, Start Num: 39
Candidate Starts for Briakila_99:
(Start: 39 @67763 has 117 MA's), (50, 67694), (65, 67595),

Gene: BrownCNA_87 Start: 65995, Stop: 65693, Start Num: 39
Candidate Starts for BrownCNA_87:
(2, 66586), (4, 66382), (6, 66256), (13, 66169), (14, 66139), (16, 66124), (Start: 31 @66052 has 1 MA's), (Start: 39 @65995 has 117 MA's), (44, 65953), (48, 65920), (50, 65908), (55, 65878), (58, 65851), (61, 65827), (63, 65794), (65, 65788), (68, 65773), (70, 65761), (71, 65755), (73, 65746),

Gene: Brownie5_86 Start: 65274, Stop: 64981, Start Num: 34
Candidate Starts for Brownie5_86:
(Start: 30 @65283 has 5 MA's), (Start: 34 @65274 has 18 MA's), (Start: 39 @65238 has 117 MA's), (50, 65169),

Gene: CRB2_90 Start: 69304, Stop: 69035, Start Num: 39
Candidate Starts for CRB2_90:
(Start: 39 @69304 has 117 MA's), (50, 69220), (69, 69085),

Gene: CaiB_81 Start: 60237, Stop: 59980, Start Num: 39
Candidate Starts for CaiB_81:
(Start: 25 @60312 has 2 MA's), (Start: 28 @60309 has 1 MA's), (35, 60273), (Start: 39 @60237 has 117 MA's), (42, 60213), (50, 60162), (66, 60051), (70, 60027),

Gene: Calamitous_87 Start: 65121, Stop: 64864, Start Num: 39
Candidate Starts for Calamitous_87:
(Start: 30 @65166 has 5 MA's), (Start: 34 @65157 has 18 MA's), (Start: 39 @65121 has 117 MA's), (50, 65052),

Gene: Casbah_98 Start: 67574, Stop: 67338, Start Num: 39
Candidate Starts for Casbah_98:
(Start: 39 @67574 has 117 MA's), (50, 67505), (62, 67424), (65, 67406),

Gene: ChaChing_98 Start: 67266, Stop: 67036, Start Num: 39
Candidate Starts for ChaChing_98:
(Start: 39 @67266 has 117 MA's), (50, 67203), (65, 67104),

Gene: Chalmers_98 Start: 68004, Stop: 67774, Start Num: 39
Candidate Starts for Chalmers_98:
(Start: 39 @68004 has 117 MA's), (50, 67941), (65, 67842),

Gene: Chandler_98 Start: 68048, Stop: 67812, Start Num: 39
Candidate Starts for Chandler_98:
(Start: 39 @68048 has 117 MA's), (50, 67979), (57, 67934), (65, 67880),

Gene: CharlottesWeb_78 Start: 58743, Stop: 58495, Start Num: 39
Candidate Starts for CharlottesWeb_78:
(10, 58956), (20, 58851), (27, 58815), (35, 58779), (Start: 39 @58743 has 117 MA's), (48, 58692), (63, 58578), (64, 58575), (76, 58509),

Gene: Chentzyk_100 Start: 68204, Stop: 67968, Start Num: 39
Candidate Starts for Chentzyk_100:
(Start: 39 @68204 has 117 MA's), (50, 68135), (62, 68054), (65, 68036),

Gene: CherryTomatoes_199 Start: 137102, Stop: 137362, Start Num: 40
Candidate Starts for CherryTomatoes_199:
(22, 136994), (Start: 40 @137102 has 4 MA's), (50, 137171), (64, 137291),

Gene: CloverMinnie_80 Start: 59790, Stop: 59458, Start Num: 25
Candidate Starts for CloverMinnie_80:
(Start: 25 @59790 has 2 MA's), (Start: 28 @59787 has 1 MA's), (35, 59751), (Start: 39 @59715 has 117 MA's), (42, 59691), (50, 59640), (66, 59529), (70, 59505),

Gene: Coco2012_77 Start: 58367, Stop: 58119, Start Num: 39
Candidate Starts for Coco2012_77:
(10, 58580), (20, 58475), (27, 58439), (35, 58403), (Start: 39 @58367 has 117 MA's), (48, 58316), (63, 58202), (64, 58199), (76, 58133),

Gene: Coffee_85 Start: 65231, Stop: 64974, Start Num: 39
Candidate Starts for Coffee_85:
(Start: 30 @65276 has 5 MA's), (Start: 34 @65267 has 18 MA's), (Start: 39 @65231 has 117 MA's), (50, 65162),

Gene: Coldpizza_69 Start: 56370, Stop: 56140, Start Num: 39
Candidate Starts for Coldpizza_69:
(Start: 39 @56370 has 117 MA's), (49, 56298), (50, 56295),

Gene: Compostia_97 Start: 67726, Stop: 67490, Start Num: 39
Candidate Starts for Compostia_97:
(Start: 39 @67726 has 117 MA's), (50, 67657), (57, 67612), (65, 67558),

Gene: Cooper_87 Start: 65343, Stop: 65047, Start Num: 39
Candidate Starts for Cooper_87:
(32, 65397), (Start: 39 @65343 has 117 MA's), (48, 65268), (50, 65256), (55, 65226), (58, 65199), (63, 65145), (70, 65112),

Gene: Corofin_98 Start: 67283, Stop: 67047, Start Num: 39
Candidate Starts for Corofin_98:
(Start: 39 @67283 has 117 MA's), (50, 67214), (65, 67115),

Gene: Daisy_97 Start: 66832, Stop: 66596, Start Num: 39
Candidate Starts for Daisy_97:
(Start: 39 @66832 has 117 MA's), (50, 66763), (57, 66718), (65, 66664),

Gene: Deenasa_99 Start: 68486, Stop: 68250, Start Num: 39
Candidate Starts for Deenasa_99:
(Start: 39 @68486 has 117 MA's), (50, 68417), (57, 68372), (65, 68318),

Gene: Devonte_96 Start: 66898, Stop: 66662, Start Num: 39
Candidate Starts for Devonte_96:
(Start: 39 @66898 has 117 MA's), (50, 66829), (57, 66784), (65, 66730),

Gene: DigitDog_94 Start: 68274, Stop: 67966, Start Num: 39
Candidate Starts for DigitDog_94:
(Start: 39 @68274 has 117 MA's), (43, 68241), (50, 68193), (56, 68151), (65, 68076), (70, 68049),

Gene: Donny_92 Start: 67567, Stop: 67298, Start Num: 39
Candidate Starts for Donny_92:
(Start: 39 @67567 has 117 MA's), (50, 67492), (54, 67474), (72, 67354),

Gene: Eaglehorse_87 Start: 65116, Stop: 64859, Start Num: 39
Candidate Starts for Eaglehorse_87:
(Start: 30 @65161 has 5 MA's), (Start: 34 @65152 has 18 MA's), (Start: 39 @65116 has 117 MA's), (50, 65047),

Gene: EastView9101_92 Start: 67759, Stop: 67490, Start Num: 39
Candidate Starts for EastView9101_92:
(Start: 39 @67759 has 117 MA's), (50, 67684), (54, 67666), (72, 67546),

Gene: Evaa_72 Start: 54428, Stop: 54195, Start Num: 39
Candidate Starts for Evaa_72:
(Start: 39 @54428 has 117 MA's), (48, 54377), (50, 54365), (59, 54296),

Gene: Fanaw_81 Start: 65582, Stop: 65280, Start Num: 39
Candidate Starts for Fanaw_81:
(2, 66173), (4, 65969), (6, 65843), (13, 65756), (Start: 31 @65639 has 1 MA's), (Start: 39 @65582 has 117 MA's), (44, 65540), (48, 65507), (50, 65495), (55, 65465), (58, 65438), (61, 65414), (63, 65381), (65, 65375), (68, 65360), (70, 65348), (71, 65342), (73, 65333),

Gene: Faze9_85 Start: 65253, Stop: 64996, Start Num: 39
Candidate Starts for Faze9_85:
(Start: 30 @65298 has 5 MA's), (Start: 34 @65289 has 18 MA's), (Start: 39 @65253 has 117 MA's), (50, 65184),

Gene: FelixTres_81 Start: 59753, Stop: 59424, Start Num: 28
Candidate Starts for FelixTres_81:
(Start: 25 @59756 has 2 MA's), (Start: 28 @59753 has 1 MA's), (35, 59717), (Start: 39 @59681 has 117 MA's), (42, 59657), (50, 59606), (66, 59495), (70, 59471),

Gene: Fortunato_84 Start: 65374, Stop: 65072, Start Num: 39
Candidate Starts for Fortunato_84:
(3, 65821), (4, 65761), (6, 65635), (13, 65548), (Start: 31 @65431 has 1 MA's), (Start: 39 @65374 has 117 MA's), (44, 65332), (48, 65299), (50, 65287), (55, 65257), (58, 65230), (61, 65206), (63, 65173), (65, 65167), (68, 65152), (70, 65140), (71, 65134), (73, 65125),

Gene: Frederick_87 Start: 65861, Stop: 65559, Start Num: 39
Candidate Starts for Frederick_87:
(4, 66248), (6, 66122), (Start: 31 @65918 has 1 MA's), (Start: 39 @65861 has 117 MA's), (44, 65819), (48, 65786), (50, 65774), (55, 65744), (61, 65693), (63, 65660), (65, 65654), (68, 65639), (70, 65627), (71, 65621), (73, 65612),

Gene: FrenchFry_87 Start: 65277, Stop: 64984, Start Num: 34
Candidate Starts for FrenchFry_87:
(Start: 30 @65286 has 5 MA's), (Start: 34 @65277 has 18 MA's), (Start: 39 @65241 has 117 MA's), (50, 65172),

Gene: Fresco_81 Start: 59793, Stop: 59545, Start Num: 39
Candidate Starts for Fresco_81:

(15, 59925), (21, 59898), (35, 59829), (Start: 39 @59793 has 117 MA's), (48, 59742), (55, 59700), (64, 59625), (76, 59559),

Gene: Gadjet_97 Start: 66536, Stop: 66300, Start Num: 39
Candidate Starts for Gadjet_97:
(Start: 39 @66536 has 117 MA's), (50, 66467), (62, 66386), (65, 66368),

Gene: Gervas_99 Start: 67727, Stop: 67491, Start Num: 39
Candidate Starts for Gervas_99:
(Start: 39 @67727 has 117 MA's), (50, 67658), (62, 67577), (65, 67559),

Gene: Glass_88 Start: 65283, Stop: 64990, Start Num: 34
Candidate Starts for Glass_88:
(Start: 30 @65292 has 5 MA's), (Start: 34 @65283 has 18 MA's), (Start: 39 @65247 has 117 MA's), (50, 65178),

Gene: GlenHope_99 Start: 67302, Stop: 67066, Start Num: 39
Candidate Starts for GlenHope_99:
(Start: 39 @67302 has 117 MA's), (50, 67233), (57, 67188), (65, 67134),

Gene: Glubnar_98 Start: 67218, Stop: 66982, Start Num: 39
Candidate Starts for Glubnar_98:
(Start: 39 @67218 has 117 MA's), (50, 67149), (62, 67068), (65, 67050),

Gene: Godines_86 Start: 65188, Stop: 64895, Start Num: 34
Candidate Starts for Godines_86:
(Start: 30 @65197 has 5 MA's), (Start: 34 @65188 has 18 MA's), (Start: 39 @65152 has 117 MA's), (50, 65083),

Gene: Halfpint_97 Start: 67047, Stop: 66811, Start Num: 39
Candidate Starts for Halfpint_97:
(Start: 39 @67047 has 117 MA's), (50, 66978), (57, 66933), (65, 66879),

Gene: Hangman_86 Start: 66073, Stop: 65771, Start Num: 39
Candidate Starts for Hangman_86:
(4, 66460), (6, 66334), (Start: 31 @66130 has 1 MA's), (Start: 39 @66073 has 117 MA's), (44, 66031), (48, 65998), (50, 65986), (55, 65956), (58, 65929), (61, 65905), (63, 65872), (65, 65866), (68, 65851), (70, 65839), (71, 65833), (73, 65824),

Gene: HarveySr_95 Start: 66371, Stop: 66135, Start Num: 39
Candidate Starts for HarveySr_95:
(Start: 39 @66371 has 117 MA's), (50, 66302), (65, 66203),

Gene: Heathcliff_98 Start: 67226, Stop: 66990, Start Num: 39
Candidate Starts for Heathcliff_98:
(Start: 39 @67226 has 117 MA's), (50, 67157), (57, 67112), (65, 67058),

Gene: Hedgerow_86 Start: 65240, Stop: 64947, Start Num: 34
Candidate Starts for Hedgerow_86:
(Start: 30 @65249 has 5 MA's), (Start: 34 @65240 has 18 MA's), (Start: 39 @65204 has 117 MA's), (50, 65135),

Gene: Holeinone_86 Start: 65129, Stop: 64836, Start Num: 34

Candidate Starts for Holeinone_86:
(Start: 30 @65138 has 5 MA's), (Start: 34 @65129 has 18 MA's), (Start: 39 @65093 has 117 MA's), (50, 65024),

Gene: Hydro_86 Start: 65948, Stop: 65646, Start Num: 39
Candidate Starts for Hydro_86:
(5, 66236), (Start: 31 @66005 has 1 MA's), (Start: 39 @65948 has 117 MA's), (44, 65906), (48, 65873), (50, 65861), (55, 65831), (58, 65804), (61, 65780), (63, 65747), (65, 65741), (68, 65726), (70, 65714), (71, 65708), (73, 65699),

Gene: Indlovu_84 Start: 65892, Stop: 65605, Start Num: 38
Candidate Starts for Indlovu_84:
(Start: 38 @65892 has 1 MA's), (50, 65790), (57, 65730), (64, 65679),

Gene: ItsyBitsy1_83 Start: 65356, Stop: 65063, Start Num: 34
Candidate Starts for ItsyBitsy1_83:
(Start: 30 @65365 has 5 MA's), (Start: 34 @65356 has 18 MA's), (Start: 39 @65320 has 117 MA's), (50, 65251),

Gene: Jackstina_91 Start: 67143, Stop: 66907, Start Num: 39
Candidate Starts for Jackstina_91:
(Start: 39 @67143 has 117 MA's), (50, 67074), (57, 67029), (65, 66975),

Gene: JaguarMi_80 Start: 65926, Stop: 65639, Start Num: 39
Candidate Starts for JaguarMi_80:
(6, 66187), (7, 66178), (Start: 31 @65983 has 1 MA's), (Start: 39 @65926 has 117 MA's), (44, 65884), (48, 65851), (50, 65839), (53, 65824), (58, 65797), (63, 65740), (65, 65734), (68, 65719), (70, 65707), (71, 65701), (73, 65692),

Gene: JellyBelly_77 Start: 58752, Stop: 58504, Start Num: 39
Candidate Starts for JellyBelly_77:
(10, 58965), (20, 58860), (27, 58824), (35, 58788), (Start: 39 @58752 has 117 MA's), (48, 58701), (63, 58587), (64, 58584), (76, 58518),

Gene: JoyceMaria_86 Start: 65899, Stop: 65597, Start Num: 39
Candidate Starts for JoyceMaria_86:
(4, 66286), (6, 66160), (13, 66073), (14, 66043), (16, 66028), (Start: 31 @65956 has 1 MA's), (Start: 39 @65899 has 117 MA's), (44, 65857), (48, 65824), (50, 65812), (55, 65782), (58, 65755), (61, 65731), (63, 65698), (65, 65692), (68, 65677), (70, 65665), (71, 65659), (73, 65650),

Gene: Kaleb_86 Start: 65250, Stop: 64993, Start Num: 39
Candidate Starts for Kaleb_86:
(Start: 30 @65295 has 5 MA's), (Start: 34 @65286 has 18 MA's), (Start: 39 @65250 has 117 MA's), (50, 65181),

Gene: Kamiyu_98 Start: 67230, Stop: 66994, Start Num: 39
Candidate Starts for Kamiyu_98:
(Start: 39 @67230 has 117 MA's), (50, 67161), (62, 67080), (65, 67062),

Gene: KayaCho_89 Start: 67455, Stop: 67165, Start Num: 39
Candidate Starts for KayaCho_89:
(24, 67539), (Start: 25 @67536 has 2 MA's), (Start: 28 @67533 has 1 MA's), (Start: 34 @67503 has 18 MA's), (37, 67497), (Start: 39 @67455 has 117 MA's), (47, 67392), (48, 67383), (50, 67371), (51,

67368), (57, 67323), (63, 67263), (65, 67257), (70, 67230), (73, 67215),

Gene: Kheth_86 Start: 65192, Stop: 64899, Start Num: 34
Candidate Starts for Kheth_86:
(Start: 30 @65201 has 5 MA's), (Start: 34 @65192 has 18 MA's), (Start: 39 @65156 has 117 MA's), (50, 65087),

Gene: Kolhan_87 Start: 65143, Stop: 64886, Start Num: 39
Candidate Starts for Kolhan_87:
(Start: 30 @65188 has 5 MA's), (Start: 34 @65179 has 18 MA's), (Start: 39 @65143 has 117 MA's), (50, 65074),

Gene: Kronus_98 Start: 68315, Stop: 68079, Start Num: 39
Candidate Starts for Kronus_98:
(Start: 39 @68315 has 117 MA's), (50, 68246), (62, 68165), (65, 68147),

Gene: Lars_87 Start: 65218, Stop: 64961, Start Num: 39
Candidate Starts for Lars_87:
(Start: 30 @65263 has 5 MA's), (Start: 34 @65254 has 18 MA's), (Start: 39 @65218 has 117 MA's), (50, 65149),

Gene: Laurie_85 Start: 64565, Stop: 64305, Start Num: 39
Candidate Starts for Laurie_85:
(Start: 30 @64610 has 5 MA's), (Start: 34 @64601 has 18 MA's), (Start: 39 @64565 has 117 MA's), (45, 64523), (50, 64493), (64, 64382),

Gene: Lephleur_86 Start: 65111, Stop: 64818, Start Num: 34
Candidate Starts for Lephleur_86:
(Start: 30 @65120 has 5 MA's), (Start: 34 @65111 has 18 MA's), (Start: 39 @65075 has 117 MA's), (50, 65006),

Gene: LestyG_96 Start: 66795, Stop: 66565, Start Num: 39
Candidate Starts for LestyG_96:
(Start: 39 @66795 has 117 MA's), (50, 66732), (65, 66633),

Gene: Ligma_81 Start: 59787, Stop: 59539, Start Num: 39
Candidate Starts for Ligma_81:
(15, 59919), (21, 59892), (35, 59823), (Start: 39 @59787 has 117 MA's), (48, 59736), (55, 59694), (64, 59619), (76, 59553),

Gene: LilSmirk_86 Start: 65158, Stop: 64856, Start Num: 30
Candidate Starts for LilSmirk_86:
(Start: 30 @65158 has 5 MA's), (Start: 34 @65149 has 18 MA's), (Start: 39 @65113 has 117 MA's), (50, 65044),

Gene: LittleMunchkin_80 Start: 61488, Stop: 61228, Start Num: 39
Candidate Starts for LittleMunchkin_80:
(Start: 39 @61488 has 117 MA's), (52, 61410), (68, 61287), (76, 61239),

Gene: LizLemon_86 Start: 65282, Stop: 64989, Start Num: 34
Candidate Starts for LizLemon_86:
(Start: 30 @65291 has 5 MA's), (Start: 34 @65282 has 18 MA's), (Start: 39 @65246 has 117 MA's), (50, 65177),

Gene: Lolalove_87 Start: 65892, Stop: 65590, Start Num: 39
Candidate Starts for Lolalove_87:
(2, 66483), (4, 66279), (6, 66153), (13, 66066), (Start: 31 @65949 has 1 MA's), (Start: 39 @65892 has 117 MA's), (44, 65850), (48, 65817), (50, 65805), (55, 65775), (58, 65748), (61, 65724), (63, 65691), (65, 65685), (68, 65670), (70, 65658), (71, 65652), (73, 65643),

Gene: Magpie_82 Start: 65575, Stop: 65273, Start Num: 39
Candidate Starts for Magpie_82:
(1, 66226), (4, 65962), (6, 65836), (13, 65749), (Start: 31 @65632 has 1 MA's), (Start: 39 @65575 has 117 MA's), (44, 65533), (48, 65500), (50, 65488), (55, 65458), (58, 65431), (61, 65407), (63, 65374), (65, 65368), (68, 65353), (70, 65341), (71, 65335), (73, 65326),

Gene: MakoManhole_79 Start: 60210, Stop: 59953, Start Num: 39
Candidate Starts for MakoManhole_79:
(Start: 25 @60285 has 2 MA's), (Start: 28 @60282 has 1 MA's), (35, 60246), (Start: 39 @60210 has 117 MA's), (50, 60135), (66, 60024), (70, 60000),

Gene: Mariokart_78 Start: 58981, Stop: 58733, Start Num: 39
Candidate Starts for Mariokart_78:
(10, 59194), (20, 59089), (27, 59053), (35, 59017), (Start: 39 @58981 has 117 MA's), (48, 58930), (63, 58816), (64, 58813), (76, 58747),

Gene: Marley1013_96 Start: 67761, Stop: 67525, Start Num: 39
Candidate Starts for Marley1013_96:
(Start: 39 @67761 has 117 MA's), (50, 67692), (57, 67647), (65, 67593),

Gene: Marlia_98 Start: 67323, Stop: 67087, Start Num: 39
Candidate Starts for Marlia_98:
(Start: 39 @67323 has 117 MA's), (50, 67254), (62, 67173), (65, 67155),

Gene: MasterPo_87 Start: 65150, Stop: 64857, Start Num: 34
Candidate Starts for MasterPo_87:
(Start: 30 @65159 has 5 MA's), (Start: 34 @65150 has 18 MA's), (Start: 39 @65114 has 117 MA's), (50, 65045),

Gene: Minnow_93 Start: 67676, Stop: 67386, Start Num: 39
Candidate Starts for Minnow_93:
(24, 67760), (Start: 25 @67757 has 2 MA's), (Start: 28 @67754 has 1 MA's), (Start: 34 @67724 has 18 MA's), (37, 67718), (Start: 39 @67676 has 117 MA's), (47, 67613), (48, 67604), (50, 67592), (51, 67589), (57, 67544), (63, 67484), (65, 67478), (70, 67451), (71, 67445), (73, 67436),

Gene: Mithril_85 Start: 65732, Stop: 65430, Start Num: 39
Candidate Starts for Mithril_85:
(3, 66179), (4, 66119), (6, 65993), (Start: 31 @65789 has 1 MA's), (Start: 39 @65732 has 117 MA's), (44, 65690), (48, 65657), (50, 65645), (55, 65615), (58, 65588), (61, 65564), (63, 65531), (65, 65525), (68, 65510), (70, 65498), (71, 65492), (73, 65483),

Gene: MmasiCarm_99 Start: 67658, Stop: 67422, Start Num: 39
Candidate Starts for MmasiCarm_99:
(Start: 39 @67658 has 117 MA's), (50, 67589), (62, 67508), (65, 67490),

Gene: Mortcellus_98 Start: 68396, Stop: 68160, Start Num: 39

Candidate Starts for Mortcellus_98:
(Start: 39 @68396 has 117 MA's), (50, 68327), (62, 68246), (65, 68228),

Gene: Morty007_96 Start: 68028, Stop: 67792, Start Num: 39
Candidate Starts for Morty007_96:
(Start: 39 @68028 has 117 MA's), (50, 67959), (57, 67914), (65, 67860),

Gene: MossRose_80 Start: 59689, Stop: 59432, Start Num: 39
Candidate Starts for MossRose_80:
(Start: 25 @59764 has 2 MA's), (Start: 28 @59761 has 1 MA's), (35, 59725), (Start: 39 @59689 has 117 MA's), (42, 59665), (50, 59614), (66, 59503), (70, 59479),

Gene: Mudslide_86 Start: 66122, Stop: 65820, Start Num: 39
Candidate Starts for Mudslide_86:
(2, 66713), (4, 66509), (6, 66383), (13, 66296), (14, 66266), (16, 66251), (Start: 31 @66179 has 1 MA's), (Start: 39 @66122 has 117 MA's), (44, 66080), (48, 66047), (50, 66035), (55, 66005), (58, 65978), (61, 65954), (63, 65921), (65, 65915), (68, 65900), (70, 65888), (71, 65882), (73, 65873),

Gene: Mulaychimus_99 Start: 67837, Stop: 67601, Start Num: 39
Candidate Starts for Mulaychimus_99:
(Start: 39 @67837 has 117 MA's), (50, 67768), (62, 67687), (65, 67669),

Gene: Mysterious_91 Start: 67652, Stop: 67392, Start Num: 39
Candidate Starts for Mysterious_91:
(Start: 39 @67652 has 117 MA's), (48, 67589), (75, 67421),

Gene: NHagos_77 Start: 57942, Stop: 57682, Start Num: 39
Candidate Starts for NHagos_77:
(33, 57990), (Start: 34 @57987 has 18 MA's), (Start: 39 @57942 has 117 MA's), (48, 57885), (50, 57873), (60, 57795),

Gene: Nangang_93 Start: 68170, Stop: 67862, Start Num: 39
Candidate Starts for Nangang_93:
(Start: 39 @68170 has 117 MA's), (43, 68137), (50, 68089), (56, 68047), (65, 67972), (70, 67945),

Gene: Nehemiah_91 Start: 67520, Stop: 67260, Start Num: 39
Candidate Starts for Nehemiah_91:
(Start: 39 @67520 has 117 MA's), (48, 67457), (75, 67289),

Gene: Neos5_97 Start: 67484, Stop: 67248, Start Num: 39
Candidate Starts for Neos5_97:
(Start: 39 @67484 has 117 MA's), (50, 67415), (65, 67316),

Gene: Nozo_98 Start: 68037, Stop: 67801, Start Num: 39
Candidate Starts for Nozo_98:
(Start: 39 @68037 has 117 MA's), (50, 67968), (65, 67869),

Gene: Obutu_100 Start: 67841, Stop: 67605, Start Num: 39
Candidate Starts for Obutu_100:
(Start: 39 @67841 has 117 MA's), (50, 67772), (62, 67691), (65, 67673),

Gene: Olivio_98 Start: 67477, Stop: 67241, Start Num: 39
Candidate Starts for Olivio_98:

(Start: 39 @67477 has 117 MA's), (50, 67408), (62, 67327), (65, 67309),

Gene: Opia_87 Start: 65184, Stop: 64882, Start Num: 30
Candidate Starts for Opia_87:
(Start: 30 @65184 has 5 MA's), (Start: 34 @65175 has 18 MA's), (Start: 39 @65139 has 117 MA's), (50, 65070),

Gene: OrangeOswald_97 Start: 67272, Stop: 67036, Start Num: 39
Candidate Starts for OrangeOswald_97:
(Start: 39 @67272 has 117 MA's), (50, 67203), (65, 67104),

Gene: PenguinLover67_90 Start: 66949, Stop: 66680, Start Num: 39
Candidate Starts for PenguinLover67_90:
(29, 67021), (Start: 39 @66949 has 117 MA's), (50, 66865), (74, 66700),

Gene: Phaedrus_93 Start: 66687, Stop: 66451, Start Num: 39
Candidate Starts for Phaedrus_93:
(Start: 39 @66687 has 117 MA's), (50, 66618), (62, 66537), (65, 66519),

Gene: Phantasmagoria_85 Start: 65121, Stop: 64864, Start Num: 39
Candidate Starts for Phantasmagoria_85:
(Start: 39 @65121 has 117 MA's), (50, 65052),

Gene: Phayeta_100 Start: 67522, Stop: 67286, Start Num: 39
Candidate Starts for Phayeta_100:
(12, 67696), (17, 67642), (19, 67633), (23, 67615), (26, 67597), (33, 67564), (Start: 39 @67522 has 117 MA's), (50, 67453), (62, 67372), (65, 67354),

Gene: Phelemich_89 Start: 67558, Stop: 67298, Start Num: 39
Candidate Starts for Phelemich_89:
(Start: 39 @67558 has 117 MA's), (41, 67543), (48, 67495), (75, 67327),

Gene: Philly_97 Start: 67120, Stop: 66884, Start Num: 39
Candidate Starts for Philly_97:
(Start: 39 @67120 has 117 MA's), (50, 67051), (62, 66970), (65, 66952),

Gene: Phlyer_98 Start: 67976, Stop: 67746, Start Num: 39
Candidate Starts for Phlyer_98:
(Start: 39 @67976 has 117 MA's), (50, 67913), (65, 67814),

Gene: Pipefish_97 Start: 67656, Stop: 67420, Start Num: 39
Candidate Starts for Pipefish_97:
(Start: 39 @67656 has 117 MA's), (50, 67587), (57, 67542), (65, 67488),

Gene: Prince_85 Start: 65989, Stop: 65687, Start Num: 39
Candidate Starts for Prince_85:
(4, 66376), (6, 66250), (Start: 31 @66046 has 1 MA's), (Start: 39 @65989 has 117 MA's), (44, 65947), (48, 65914), (50, 65902), (55, 65872), (58, 65845), (61, 65821), (63, 65788), (65, 65782), (68, 65767), (70, 65755), (71, 65749), (73, 65740),

Gene: PrinceCharming_86 Start: 65212, Stop: 64910, Start Num: 30
Candidate Starts for PrinceCharming_86:

(Start: 30 @65212 has 5 MA's), (Start: 34 @65203 has 18 MA's), (Start: 39 @65167 has 117 MA's), (50, 65098),

Gene: Pupper_197 Start: 136964, Stop: 137224, Start Num: 40
Candidate Starts for Pupper_197:
(22, 136856), (Start: 40 @136964 has 4 MA's), (50, 137033), (64, 137153),

Gene: Qyrzula_77 Start: 65297, Stop: 65004, Start Num: 34
Candidate Starts for Qyrzula_77:
(Start: 30 @65306 has 5 MA's), (Start: 34 @65297 has 18 MA's), (Start: 39 @65261 has 117 MA's), (50, 65192),

Gene: RagingRooster_98 Start: 67268, Stop: 67032, Start Num: 39
Candidate Starts for RagingRooster_98:
(Start: 39 @67268 has 117 MA's), (50, 67199), (57, 67154), (65, 67100),

Gene: RawrgerThat_85 Start: 65580, Stop: 65278, Start Num: 39
Candidate Starts for RawrgerThat_85:
(3, 66027), (4, 65967), (6, 65841), (Start: 31 @65637 has 1 MA's), (Start: 39 @65580 has 117 MA's), (44, 65538), (48, 65505), (50, 65493), (55, 65463), (58, 65436), (61, 65412), (63, 65379), (65, 65373), (68, 65358), (70, 65346), (71, 65340), (73, 65331),

Gene: Reccee_93 Start: 68010, Stop: 67741, Start Num: 39
Candidate Starts for Reccee_93:
(Start: 39 @68010 has 117 MA's), (50, 67935), (54, 67917), (72, 67797),

Gene: Reprobate_91 Start: 67563, Stop: 67303, Start Num: 39
Candidate Starts for Reprobate_91:
(Start: 39 @67563 has 117 MA's), (41, 67548), (48, 67500), (75, 67332),

Gene: Rhinoforte_86 Start: 65158, Stop: 64901, Start Num: 39
Candidate Starts for Rhinoforte_86:
(Start: 30 @65203 has 5 MA's), (Start: 34 @65194 has 18 MA's), (Start: 39 @65158 has 117 MA's), (50, 65089),

Gene: Rich_90 Start: 67797, Stop: 67528, Start Num: 39
Candidate Starts for Rich_90:
(Start: 39 @67797 has 117 MA's), (50, 67722), (54, 67704), (72, 67584),

Gene: Rita130_91 Start: 67713, Stop: 67444, Start Num: 39
Candidate Starts for Rita130_91:
(Start: 39 @67713 has 117 MA's), (50, 67638), (54, 67620), (72, 67500),

Gene: Rita1961_99 Start: 67613, Stop: 67377, Start Num: 39
Candidate Starts for Rita1961_99:
(Start: 39 @67613 has 117 MA's), (50, 67544), (62, 67463), (65, 67445),

Gene: RomaT_98 Start: 67836, Stop: 67600, Start Num: 39
Candidate Starts for RomaT_98:
(Start: 39 @67836 has 117 MA's), (50, 67767), (62, 67686), (65, 67668),

Gene: Rosebush_84 Start: 65230, Stop: 64973, Start Num: 39
Candidate Starts for Rosebush_84:

(Start: 30 @65275 has 5 MA's), (Start: 34 @65266 has 18 MA's), (Start: 39 @65230 has 117 MA's), (50, 65161),

Gene: SCentae_196 Start: 137156, Stop: 137416, Start Num: 40
Candidate Starts for SCentae_196:
(22, 137048), (Start: 40 @137156 has 4 MA's), (50, 137225), (64, 137345),

Gene: Sabella_86 Start: 65102, Stop: 64809, Start Num: 34
Candidate Starts for Sabella_86:
(Start: 30 @65111 has 5 MA's), (Start: 34 @65102 has 18 MA's), (Start: 39 @65066 has 117 MA's), (50, 64997),

Gene: Serendipitous_93 Start: 67738, Stop: 67469, Start Num: 39
Candidate Starts for Serendipitous_93:
(Start: 39 @67738 has 117 MA's), (50, 67663), (54, 67645), (72, 67525),

Gene: Shatter_81 Start: 59787, Stop: 59539, Start Num: 39
Candidate Starts for Shatter_81:
(15, 59919), (21, 59892), (35, 59823), (Start: 39 @59787 has 117 MA's), (48, 59736), (55, 59694), (64, 59619), (76, 59553),

Gene: Shenandoah_98 Start: 67188, Stop: 66952, Start Num: 39
Candidate Starts for Shenandoah_98:
(Start: 39 @67188 has 117 MA's), (50, 67119), (65, 67020),

Gene: Shenyu_93 Start: 68168, Stop: 67860, Start Num: 39
Candidate Starts for Shenyu_93:
(Start: 39 @68168 has 117 MA's), (43, 68135), (50, 68087), (56, 68045), (65, 67970), (70, 67943),

Gene: SirJeffery_90 Start: 67796, Stop: 67527, Start Num: 39
Candidate Starts for SirJeffery_90:
(Start: 39 @67796 has 117 MA's), (50, 67721), (54, 67703), (72, 67583),

Gene: Sisko_79 Start: 60232, Stop: 59969, Start Num: 39
Candidate Starts for Sisko_79:
(Start: 39 @60232 has 117 MA's), (68, 60028),

Gene: Skog_28 Start: 12845, Stop: 13108, Start Num: 40
Candidate Starts for Skog_28:
(Start: 40 @12845 has 4 MA's), (46, 12893), (50, 12920), (63, 13037),

Gene: SlippinJimmy_101 Start: 68636, Stop: 68400, Start Num: 39
Candidate Starts for SlippinJimmy_101:
(Start: 39 @68636 has 117 MA's), (50, 68567), (65, 68468),

Gene: Sour_75 Start: 59915, Stop: 59661, Start Num: 39
Candidate Starts for Sour_75:
(8, 60173), (11, 60113), (18, 60035), (20, 60032), (Start: 39 @59915 has 117 MA's), (48, 59858), (50, 59846), (58, 59786), (63, 59744), (64, 59741), (67, 59726), (68, 59723), (76, 59675),

Gene: Stinger_84 Start: 64428, Stop: 64096, Start Num: 31
Candidate Starts for Stinger_84:

(9, 64629), (Start: 31 @64428 has 1 MA's), (Start: 39 @64374 has 117 MA's), (48, 64299), (50, 64287), (55, 64257), (58, 64230), (63, 64194), (65, 64188), (70, 64161), (73, 64146),

Gene: Suigeneris_93 Start: 67955, Stop: 67686, Start Num: 39
Candidate Starts for Suigeneris_93:
(Start: 39 @67955 has 117 MA's), (50, 67880), (54, 67862), (72, 67742),

Gene: SwainyDoc_98 Start: 67702, Stop: 67466, Start Num: 39
Candidate Starts for SwainyDoc_98:
(Start: 39 @67702 has 117 MA's), (50, 67633), (62, 67552), (65, 67534),

Gene: SynergyX_99 Start: 67578, Stop: 67342, Start Num: 39
Candidate Starts for SynergyX_99:
(Start: 39 @67578 has 117 MA's), (50, 67509), (57, 67464), (65, 67410),

Gene: TA17A_89 Start: 65109, Stop: 64816, Start Num: 34
Candidate Starts for TA17A_89:
(Start: 30 @65118 has 5 MA's), (Start: 34 @65109 has 18 MA's), (Start: 39 @65073 has 117 MA's), (50, 65004),

Gene: Tinciduntsolum_87 Start: 65273, Stop: 64980, Start Num: 34
Candidate Starts for Tinciduntsolum_87:
(Start: 30 @65282 has 5 MA's), (Start: 34 @65273 has 18 MA's), (Start: 39 @65237 has 117 MA's), (50, 65168),

Gene: TinyTerror_99 Start: 67699, Stop: 67463, Start Num: 39
Candidate Starts for TinyTerror_99:
(Start: 39 @67699 has 117 MA's), (50, 67630), (62, 67549), (65, 67531),

Gene: TraderJ_81 Start: 59782, Stop: 59525, Start Num: 39
Candidate Starts for TraderJ_81:
(Start: 25 @59857 has 2 MA's), (Start: 28 @59854 has 1 MA's), (35, 59818), (Start: 39 @59782 has 117 MA's), (50, 59707), (66, 59596), (70, 59572),

Gene: Tres_86 Start: 65135, Stop: 64833, Start Num: 30
Candidate Starts for Tres_86:
(Start: 30 @65135 has 5 MA's), (Start: 34 @65126 has 18 MA's), (Start: 39 @65090 has 117 MA's), (50, 65021),

Gene: Tydolla_94 Start: 67254, Stop: 67018, Start Num: 39
Candidate Starts for Tydolla_94:
(Start: 39 @67254 has 117 MA's), (50, 67185), (57, 67140), (65, 67086),

Gene: Vic9_00084 Start: 65670, Stop: 65365, Start Num: 30
Candidate Starts for Vic9_00084:
(Start: 30 @65670 has 5 MA's), (Start: 34 @65661 has 18 MA's), (Start: 39 @65625 has 117 MA's), (45, 65583), (50, 65553), (64, 65442),

Gene: VioletZ_88 Start: 66079, Stop: 65777, Start Num: 39
Candidate Starts for VioletZ_88:
(4, 66466), (6, 66340), (Start: 31 @66136 has 1 MA's), (Start: 39 @66079 has 117 MA's), (44, 66037), (48, 66004), (50, 65992), (55, 65962), (58, 65935), (61, 65911), (63, 65878), (65, 65872), (68, 65857), (70, 65845), (71, 65839), (73, 65830),

Gene: Waleliano_85 Start: 65747, Stop: 65445, Start Num: 39
Candidate Starts for Waleliano_85:
(2, 66338), (4, 66134), (6, 66008), (13, 65921), (14, 65891), (16, 65876), (Start: 31 @65804 has 1 MA's), (Start: 39 @65747 has 117 MA's), (44, 65705), (48, 65672), (50, 65660), (55, 65630), (58, 65603), (61, 65579), (63, 65546), (65, 65540), (68, 65525), (70, 65513), (71, 65507), (73, 65498),

Gene: West99_86 Start: 65260, Stop: 65003, Start Num: 39
Candidate Starts for West99_86:
(Start: 30 @65305 has 5 MA's), (Start: 34 @65296 has 18 MA's), (Start: 39 @65260 has 117 MA's), (50, 65191),

Gene: Wooper_82 Start: 59772, Stop: 59515, Start Num: 39
Candidate Starts for Wooper_82:
(Start: 25 @59847 has 2 MA's), (Start: 28 @59844 has 1 MA's), (35, 59808), (Start: 39 @59772 has 117 MA's), (42, 59748), (50, 59697), (66, 59586), (70, 59562),

Gene: Xincheng_79 Start: 65877, Stop: 65590, Start Num: 39
Candidate Starts for Xincheng_79:
(6, 66138), (Start: 31 @65934 has 1 MA's), (Start: 39 @65877 has 117 MA's), (44, 65835), (48, 65802), (50, 65790), (53, 65775), (58, 65748), (63, 65691), (65, 65685), (68, 65670), (70, 65658), (71, 65652), (73, 65643),

Gene: Yago84_78 Start: 59931, Stop: 59668, Start Num: 39
Candidate Starts for Yago84_78:
(Start: 39 @59931 has 117 MA's), (68, 59727),

Gene: Yahalom_96 Start: 67079, Stop: 66843, Start Num: 39
Candidate Starts for Yahalom_96:
(Start: 39 @67079 has 117 MA's), (50, 67010), (57, 66965), (65, 66911),

Gene: Yeshua_81 Start: 59748, Stop: 59491, Start Num: 39
Candidate Starts for Yeshua_81:
(Start: 25 @59823 has 2 MA's), (Start: 28 @59820 has 1 MA's), (35, 59784), (Start: 39 @59748 has 117 MA's), (42, 59724), (50, 59673), (66, 59562), (70, 59538),

Gene: Yinz_96 Start: 66680, Stop: 66444, Start Num: 39
Candidate Starts for Yinz_96:
(Start: 39 @66680 has 117 MA's), (50, 66611), (62, 66530), (65, 66512),

Gene: Zemanar_85 Start: 65760, Stop: 65458, Start Num: 39
Candidate Starts for Zemanar_85:
(4, 66147), (6, 66021), (Start: 31 @65817 has 1 MA's), (Start: 39 @65760 has 117 MA's), (44, 65718), (48, 65685), (50, 65673), (55, 65643), (61, 65592), (63, 65559), (65, 65553), (68, 65538), (70, 65526), (71, 65520), (73, 65511),