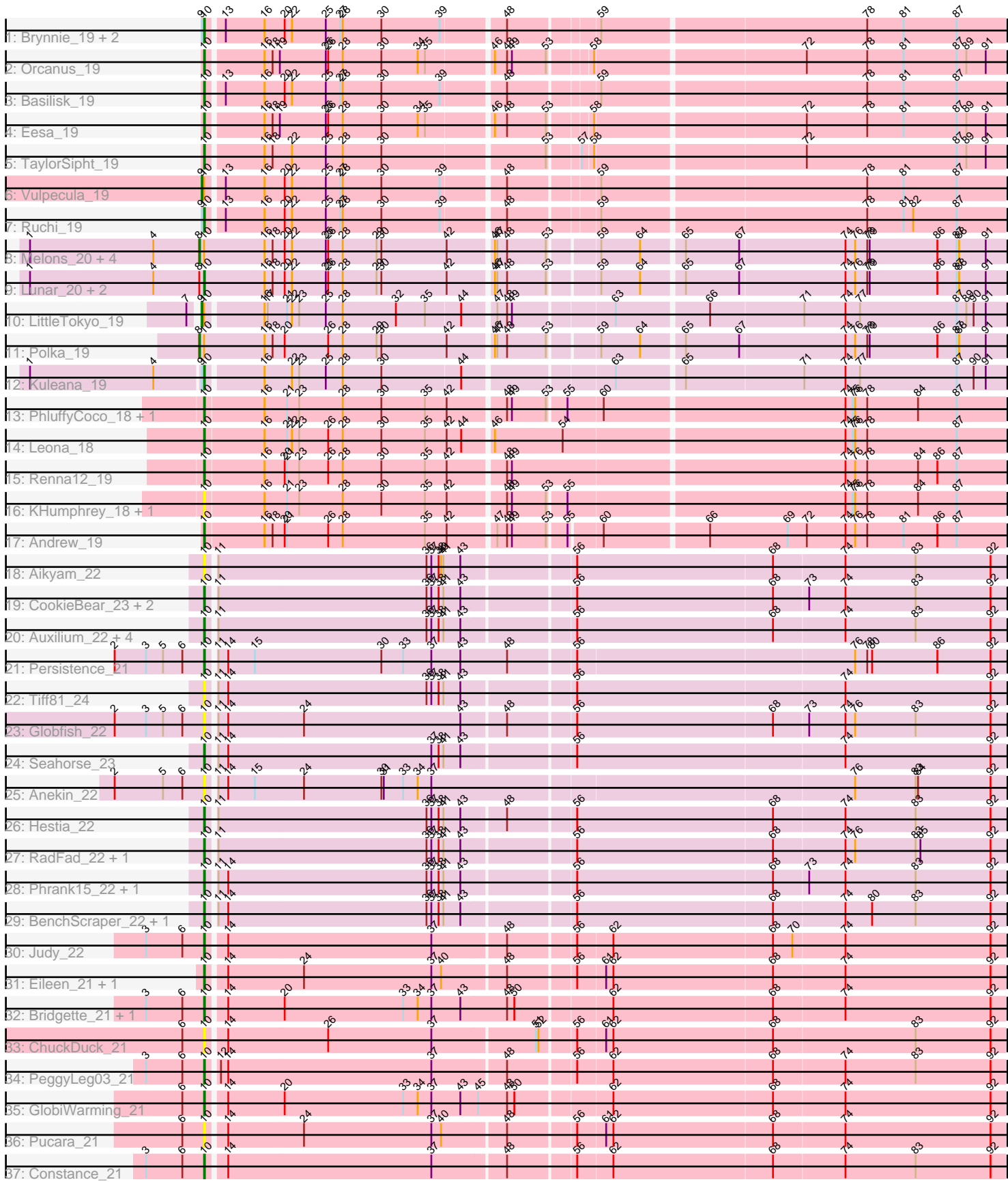


Pham 161880



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 161880 Report

This analysis was run 04/28/24 on database version 559.

Pham number 161880 has 58 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_19, Jamun_19, Chickaboom_18
- Track 2 : Orcanus_19
- Track 3 : Basilisk_19
- Track 4 : Eesa_19
- Track 5 : TaylorSipht_19
- Track 6 : Vulpecula_19
- Track 7 : Ruchi_19
- Track 8 : Melons_20, Kepler_19, Daob_20, Coral_19, Cote_20
- Track 9 : Lunar_20, Amelia_20, HannahPhantana_20
- Track 10 : LittleTokyo_19
- Track 11 : Polka_19
- Track 12 : Kuleana_19
- Track 13 : PhluffyCoco_18, RedFox_18
- Track 14 : Leona_18
- Track 15 : Renna12_19
- Track 16 : KHumphrey_18, Juno112_18
- Track 17 : Andrew_19
- Track 18 : Aikyam_22
- Track 19 : CookieBear_23, MidnightRain_22, YoungHarleezy_22
- Track 20 : Auxilium_22, Gorpy_22, Raphaella_23, BillyTP_22, Sakai_22
- Track 21 : Persistence_21
- Track 22 : Tiff81_24
- Track 23 : Globfish_22
- Track 24 : Seahorse_23
- Track 25 : Anekin_22
- Track 26 : Hestia_22
- Track 27 : RadFad_22, Hillester_22
- Track 28 : Phrank15_22, Isolde_22
- Track 29 : BenchScraper_22, Richie_22
- Track 30 : Judy_22
- Track 31 : Eileen_21, Peas_21
- Track 32 : Bridgette_21, Karkharias_21
- Track 33 : ChuckDuck_21
- Track 34 : PeggyLeg03_21
- Track 35 : GlobiWarming_21
- Track 36 : Pucara_21
- Track 37 : Constance_21

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

The start number called the most often in the published annotations is 10, it was called in 31 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aikyam_22, Amelia_20, Andrew_19, Anekin_22, Auxilium_22, Basilisk_19, BenchScraper_22, BillyTP_22, Bridgette_21, Brynnie_19, Chickaboom_18, ChuckDuck_21, Constance_21, CookieBear_23, Eesa_19, Eileen_21, Globfish_22, GlobiWarming_21, Gorpy_22, HannahPhantana_20, Hestia_22, Hillester_22, Isolde_22, Jamun_19, Judy_22, Juno112_18, KHumphrey_18, Karkharias_21, Kuleana_19, Leona_18, Lunar_20, MidnightRain_22, Orcanus_19, Peas_21, PeggyLeg03_21, Persistence_21, PhluffyCoco_18, Phrank15_22, Pucara_21, RadFad_22, Raphaella_23, RedFox_18, Renna12_19, Richie_22, Ruchi_19, Sakai_22, Seahorse_23, TaylorSipht_19, Tiff81_24, YoungHarleezy_22,

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

- Coral_19, Cote_20, Daob_20, Kepler_19, LittleTokyo_19, Melons_20, Polka_19, Vulpecula_19,

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

-

Summary by start number:

Start 8:

- Found in 9 of 58 (15.5%) of genes in pham
- Manual Annotations of this start: 6 of 39
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Coral_19 (AS2), Cote_20 (AS2), Daob_20 (AS2), Kepler_19 (AS2), Melons_20 (AS2), Polka_19 (AS2),

Start 9:

- Found in 7 of 58 (12.1%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 28.6% of time when present
- Phage (with cluster) where this start called: LittleTokyo_19 (AS2), Vulpecula_19 (AS1),

Start 10:

- Found in 58 of 58 (100.0%) of genes in pham
- Manual Annotations of this start: 31 of 39
- Called 86.2% of time when present
- Phage (with cluster) where this start called: Aikyam_22 (AY), Amelia_20 (AS2), Andrew_19 (AS3), Anekin_22 (AY), Auxilium_22 (AY), Basilisk_19 (AS1), BenchScraper_22 (AY), BillyTP_22 (AY), Bridgette_21 (FA), Brynnie_19 (AS1), Chickaboom_18 (AS1), ChuckDuck_21 (FA), Constance_21 (FA), CookieBear_23 (AY), Eesa_19 (AS1), Eileen_21 (FA), Globfish_22 (AY), GlobiWarming_21 (FA), Gorpy_22 (AY), HannahPhantana_20 (AS2), Hestia_22 (AY), Hillester_22 (AY),

Isolde_22 (AY), Jamun_19 (AS1), Judy_22 (FA), Juno112_18 (AS3), KHumphrey_18 (AS3), Karkharias_21 (FA), Kuleana_19 (AS2), Leona_18 (AS3), Lunar_20 (AS2), MidnightRain_22 (AY), Orcanus_19 (AS1), Peas_21 (FA), PeggyLeg03_21 (FA), Persistence_21 (AY), PhluffyCoco_18 (AS3), Phrank15_22 (AY), Pucara_21 (FA), RadFad_22 (AY), Raphaella_23 (AY), RedFox_18 (AS3), Renna12_19 (AS3), Richie_22 (AY), Ruchi_19 (AS1), Sakai_22 (AY), Seahorse_23 (AY), TaylorSipht_19 (AS1), Tiff81_24 (AY), YoungHarleezy_22 (AY),

Summary by clusters:

There are 5 clusters represented in this pham: AY, AS3, AS1, AS2, FA,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 1 time for cluster AS1.
- Start number 10 was manually annotated 7 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 8 was manually annotated 6 times for cluster AS2.
- Start number 9 was manually annotated 1 time for cluster AS2.
- Start number 10 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 10 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 10 was manually annotated 10 times for cluster AY.

Info for manual annotations of cluster FA:

- Start number 10 was manually annotated 7 times for cluster FA.

Gene Information:

Gene: Aikyam_22 Start: 16934, Stop: 17893, Start Num: 10

Candidate Starts for Aikyam_22:

(Start: 10 @16934 has 31 MA's), (11, 16943), (36, 17198), (37, 17204), (38, 17213), (40, 17216), (41, 17219), (43, 17240), (56, 17369), (68, 17609), (74, 17696), (83, 17783), (92, 17876),

Gene: Amelia_20 Start: 14633, Stop: 15586, Start Num: 10

Candidate Starts for Amelia_20:

(1, 14417), (4, 14570), (Start: 8 @14627 has 6 MA's), (Start: 10 @14633 has 31 MA's), (16, 14708), (18, 14717), (20, 14732), (22, 14741), (25, 14783), (26, 14786), (28, 14804), (29, 14846), (30, 14852), (42, 14933), (46, 14984), (47, 14987), (48, 14999), (53, 15044), (59, 15098), (64, 15146), (65, 15194), (67, 15260), (74, 15389), (76, 15401), (78, 15416), (79, 15419), (86, 15503), (87, 15527), (88, 15530), (91, 15563),

Gene: Andrew_19 Start: 14644, Stop: 15597, Start Num: 10

Candidate Starts for Andrew_19:

(Start: 10 @14644 has 31 MA's), (16, 14716), (18, 14725), (20, 14740), (21, 14743), (26, 14794), (28, 14812), (35, 14914), (42, 14941), (47, 14995), (48, 15007), (49, 15013), (53, 15052), (55, 15073), (60, 15109), (66, 15232), (69, 15328), (72, 15352), (74, 15400), (76, 15412), (78, 15427), (81, 15472), (86, 15514), (87, 15538),

Gene: Anekin_22 Start: 16896, Stop: 17858, Start Num: 10

Candidate Starts for Anekin_22:

(2, 16785), (5, 16845), (6, 16869), (Start: 10 @16896 has 31 MA's), (11, 16905), (14, 16917), (15, 16950), (24, 17010), (30, 17106), (31, 17109), (33, 17133), (34, 17151), (37, 17166), (76, 17673), (83, 17748), (84, 17751), (92, 17841),

Gene: Auxilium_22 Start: 16933, Stop: 17892, Start Num: 10

Candidate Starts for Auxilium_22:

(Start: 10 @16933 has 31 MA's), (11, 16942), (36, 17197), (37, 17203), (38, 17212), (41, 17218), (43, 17239), (56, 17368), (68, 17608), (74, 17695), (83, 17782), (92, 17875),

Gene: Basilisk_19 Start: 15922, Stop: 16863, Start Num: 10

Candidate Starts for Basilisk_19:

(Start: 10 @15922 has 31 MA's), (13, 15940), (16, 15988), (20, 16012), (22, 16021), (25, 16063), (27, 16081), (28, 16084), (30, 16132), (39, 16204), (48, 16276), (59, 16375), (78, 16693), (81, 16738), (87, 16804),

Gene: BenchScraper_22 Start: 16948, Stop: 17907, Start Num: 10

Candidate Starts for BenchScraper_22:

(Start: 10 @16948 has 31 MA's), (11, 16957), (14, 16969), (36, 17212), (37, 17218), (38, 17227), (41, 17233), (43, 17254), (56, 17383), (68, 17623), (74, 17710), (80, 17743), (83, 17797), (92, 17890),

Gene: BillyTP_22 Start: 16717, Stop: 17676, Start Num: 10

Candidate Starts for BillyTP_22:

(Start: 10 @16717 has 31 MA's), (11, 16726), (36, 16981), (37, 16987), (38, 16996), (41, 17002), (43, 17023), (56, 17152), (68, 17392), (74, 17479), (83, 17566), (92, 17659),

Gene: Bridgette_21 Start: 16995, Stop: 17957, Start Num: 10

Candidate Starts for Bridgette_21:

(3, 16923), (6, 16968), (Start: 10 @16995 has 31 MA's), (14, 17016), (20, 17085), (33, 17232), (34, 17250), (37, 17265), (43, 17301), (48, 17358), (50, 17367), (62, 17478), (68, 17673), (74, 17760), (92, 17940),

Gene: Brynnie_19 Start: 15734, Stop: 16675, Start Num: 10

Candidate Starts for Brynnie_19:

(Start: 9 @15731 has 2 MA's), (Start: 10 @15734 has 31 MA's), (13, 15752), (16, 15800), (20, 15824), (22, 15833), (25, 15875), (27, 15893), (28, 15896), (30, 15944), (39, 16016), (48, 16088), (59, 16187), (78, 16505), (81, 16550), (87, 16616),

Gene: Chickaboom_18 Start: 14660, Stop: 15601, Start Num: 10

Candidate Starts for Chickaboom_18:

(Start: 9 @14657 has 2 MA's), (Start: 10 @14660 has 31 MA's), (13, 14678), (16, 14726), (20, 14750), (22, 14759), (25, 14801), (27, 14819), (28, 14822), (30, 14870), (39, 14942), (48, 15014), (59, 15113), (78, 15431), (81, 15476), (87, 15542),

Gene: ChuckDuck_21 Start: 16837, Stop: 17793, Start Num: 10

Candidate Starts for ChuckDuck_21:

(6, 16810), (Start: 10 @16837 has 31 MA's), (14, 16858), (26, 16981), (37, 17107), (51, 17230), (52, 17233), (56, 17272), (61, 17305), (62, 17314), (68, 17509), (83, 17683), (92, 17776),

Gene: Constance_21 Start: 16977, Stop: 17933, Start Num: 10

Candidate Starts for Constance_21:

(3, 16905), (6, 16950), (Start: 10 @16977 has 31 MA's), (14, 16998), (37, 17247), (48, 17334), (56, 17412), (62, 17454), (68, 17649), (74, 17736), (83, 17823), (92, 17916),

Gene: CookieBear_23 Start: 16933, Stop: 17892, Start Num: 10

Candidate Starts for CookieBear_23:

(Start: 10 @16933 has 31 MA's), (11, 16942), (36, 17197), (37, 17203), (38, 17212), (41, 17218), (43, 17239), (56, 17368), (68, 17608), (73, 17650), (74, 17695), (83, 17782), (92, 17875),

Gene: Coral_19 Start: 14466, Stop: 15425, Start Num: 8

Candidate Starts for Coral_19:

(1, 14256), (4, 14409), (Start: 8 @14466 has 6 MA's), (Start: 10 @14472 has 31 MA's), (16, 14547), (18, 14556), (20, 14571), (22, 14580), (25, 14622), (26, 14625), (28, 14643), (29, 14685), (30, 14691), (42, 14772), (46, 14823), (47, 14826), (48, 14838), (53, 14883), (59, 14937), (64, 14985), (65, 15033), (67, 15099), (74, 15228), (76, 15240), (78, 15255), (79, 15258), (86, 15342), (87, 15366), (88, 15369), (91, 15402),

Gene: Cote_20 Start: 14627, Stop: 15586, Start Num: 8

Candidate Starts for Cote_20:

(1, 14417), (4, 14570), (Start: 8 @14627 has 6 MA's), (Start: 10 @14633 has 31 MA's), (16, 14708), (18, 14717), (20, 14732), (22, 14741), (25, 14783), (26, 14786), (28, 14804), (29, 14846), (30, 14852), (42, 14933), (46, 14984), (47, 14987), (48, 14999), (53, 15044), (59, 15098), (64, 15146), (65, 15194), (67, 15260), (74, 15389), (76, 15401), (78, 15416), (79, 15419), (86, 15503), (87, 15527), (88, 15530), (91, 15563),

Gene: Daob_20 Start: 14630, Stop: 15589, Start Num: 8

Candidate Starts for Daob_20:

(1, 14420), (4, 14573), (Start: 8 @14630 has 6 MA's), (Start: 10 @14636 has 31 MA's), (16, 14711), (18, 14720), (20, 14735), (22, 14744), (25, 14786), (26, 14789), (28, 14807), (29, 14849), (30, 14855), (42, 14936), (46, 14987), (47, 14990), (48, 15002), (53, 15047), (59, 15101), (64, 15149), (65, 15197), (67, 15263), (74, 15392), (76, 15404), (78, 15419), (79, 15422), (86, 15506), (87, 15530), (88, 15533), (91, 15566),

Gene: Eesa_19 Start: 15885, Stop: 16823, Start Num: 10

Candidate Starts for Eesa_19:

(Start: 10 @15885 has 31 MA's), (16, 15951), (18, 15960), (19, 15969), (25, 16026), (26, 16029), (28, 16047), (30, 16095), (34, 16140), (35, 16149), (46, 16224), (48, 16239), (53, 16284), (58, 16329), (72, 16578), (78, 16653), (81, 16698), (87, 16764), (89, 16776), (91, 16800),

Gene: Eileen_21 Start: 16939, Stop: 17895, Start Num: 10

Candidate Starts for Eileen_21:

(Start: 10 @16939 has 31 MA's), (14, 16960), (24, 17053), (37, 17209), (40, 17221), (48, 17296), (56, 17374), (61, 17407), (62, 17416), (68, 17611), (74, 17698), (92, 17878),

Gene: Globfish_22 Start: 17006, Stop: 17965, Start Num: 10

Candidate Starts for Globfish_22:

(2, 16895), (3, 16934), (5, 16955), (6, 16979), (Start: 10 @17006 has 31 MA's), (11, 17015), (14, 17027), (24, 17120), (43, 17312), (48, 17363), (56, 17441), (68, 17681), (73, 17723), (74, 17768), (76, 17780), (83, 17855), (92, 17948),

Gene: GlobiWarming_21 Start: 16931, Stop: 17893, Start Num: 10

Candidate Starts for GlobiWarming_21:

(6, 16904), (Start: 10 @16931 has 31 MA's), (14, 16952), (20, 17021), (33, 17168), (34, 17186), (37, 17201), (43, 17237), (45, 17258), (48, 17294), (50, 17303), (62, 17414), (68, 17609), (74, 17696), (92,

17876),

Gene: Gorpy_22 Start: 16942, Stop: 17901, Start Num: 10

Candidate Starts for Gorpy_22:

(Start: 10 @16942 has 31 MA's), (11, 16951), (36, 17206), (37, 17212), (38, 17221), (41, 17227), (43, 17248), (56, 17377), (68, 17617), (74, 17704), (83, 17791), (92, 17884),

Gene: HannahPhantana_20 Start: 14636, Stop: 15589, Start Num: 10

Candidate Starts for HannahPhantana_20:

(1, 14420), (4, 14573), (Start: 8 @14630 has 6 MA's), (Start: 10 @14636 has 31 MA's), (16, 14711), (18, 14720), (20, 14735), (22, 14744), (25, 14786), (26, 14789), (28, 14807), (29, 14849), (30, 14855), (42, 14936), (46, 14987), (47, 14990), (48, 15002), (53, 15047), (59, 15101), (64, 15149), (65, 15197), (67, 15263), (74, 15392), (76, 15404), (78, 15419), (79, 15422), (86, 15506), (87, 15530), (88, 15533), (91, 15566),

Gene: Hestia_22 Start: 17111, Stop: 18070, Start Num: 10

Candidate Starts for Hestia_22:

(Start: 10 @17111 has 31 MA's), (11, 17120), (36, 17375), (37, 17381), (38, 17390), (41, 17396), (43, 17417), (48, 17468), (56, 17546), (68, 17786), (74, 17873), (83, 17960), (92, 18053),

Gene: Hillester_22 Start: 16933, Stop: 17892, Start Num: 10

Candidate Starts for Hillester_22:

(Start: 10 @16933 has 31 MA's), (11, 16942), (36, 17197), (37, 17203), (38, 17212), (41, 17218), (43, 17239), (56, 17368), (68, 17608), (74, 17695), (76, 17707), (83, 17782), (85, 17788), (92, 17875),

Gene: Isolde_22 Start: 16768, Stop: 17727, Start Num: 10

Candidate Starts for Isolde_22:

(Start: 10 @16768 has 31 MA's), (11, 16777), (14, 16789), (36, 17032), (37, 17038), (38, 17047), (41, 17053), (43, 17074), (56, 17203), (68, 17443), (73, 17485), (74, 17530), (83, 17617), (92, 17710),

Gene: Jamun_19 Start: 15328, Stop: 16269, Start Num: 10

Candidate Starts for Jamun_19:

(Start: 9 @15325 has 2 MA's), (Start: 10 @15328 has 31 MA's), (13, 15346), (16, 15394), (20, 15418), (22, 15427), (25, 15469), (27, 15487), (28, 15490), (30, 15538), (39, 15610), (48, 15682), (59, 15781), (78, 16099), (81, 16144), (87, 16210),

Gene: Judy_22 Start: 17248, Stop: 18204, Start Num: 10

Candidate Starts for Judy_22:

(3, 17176), (6, 17221), (Start: 10 @17248 has 31 MA's), (14, 17269), (37, 17518), (48, 17605), (56, 17683), (62, 17725), (68, 17920), (70, 17944), (74, 18007), (92, 18187),

Gene: Juno112_18 Start: 14181, Stop: 15140, Start Num: 10

Candidate Starts for Juno112_18:

(Start: 10 @14181 has 31 MA's), (16, 14253), (21, 14280), (23, 14295), (28, 14349), (30, 14397), (35, 14451), (42, 14478), (48, 14544), (49, 14550), (53, 14589), (55, 14610), (74, 14943), (75, 14952), (76, 14955), (78, 14970), (84, 15033), (87, 15081),

Gene: KHumphrey_18 Start: 14178, Stop: 15137, Start Num: 10

Candidate Starts for KHumphrey_18:

(Start: 10 @14178 has 31 MA's), (16, 14250), (21, 14277), (23, 14292), (28, 14346), (30, 14394), (35, 14448), (42, 14475), (48, 14541), (49, 14547), (53, 14586), (55, 14607), (74, 14940), (75, 14949), (76, 14952), (78, 14967), (84, 15030), (87, 15078),

Gene: Karkharias_21 Start: 16935, Stop: 17897, Start Num: 10

Candidate Starts for Karkharias_21:

(3, 16863), (6, 16908), (Start: 10 @16935 has 31 MA's), (14, 16956), (20, 17025), (33, 17172), (34, 17190), (37, 17205), (43, 17241), (48, 17298), (50, 17307), (62, 17418), (68, 17613), (74, 17700), (92, 17880),

Gene: Kepler_19 Start: 14465, Stop: 15424, Start Num: 8

Candidate Starts for Kepler_19:

(1, 14255), (4, 14408), (Start: 8 @14465 has 6 MA's), (Start: 10 @14471 has 31 MA's), (16, 14546), (18, 14555), (20, 14570), (22, 14579), (25, 14621), (26, 14624), (28, 14642), (29, 14684), (30, 14690), (42, 14771), (46, 14822), (47, 14825), (48, 14837), (53, 14882), (59, 14936), (64, 14984), (65, 15032), (67, 15098), (74, 15227), (76, 15239), (78, 15254), (79, 15257), (86, 15341), (87, 15365), (88, 15368), (91, 15401),

Gene: Kuleana_19 Start: 14642, Stop: 15589, Start Num: 10

Candidate Starts for Kuleana_19:

(1, 14432), (4, 14585), (Start: 9 @14639 has 2 MA's), (Start: 10 @14642 has 31 MA's), (16, 14708), (22, 14741), (23, 14750), (25, 14783), (28, 14804), (30, 14852), (44, 14948), (63, 15116), (65, 15194), (71, 15338), (74, 15389), (77, 15407), (87, 15527), (90, 15548), (91, 15563),

Gene: Leona_18 Start: 14234, Stop: 15199, Start Num: 10

Candidate Starts for Leona_18:

(Start: 10 @14234 has 31 MA's), (16, 14306), (21, 14333), (22, 14339), (23, 14348), (26, 14384), (28, 14402), (30, 14450), (35, 14504), (42, 14531), (44, 14549), (46, 14582), (54, 14663), (74, 15002), (75, 15011), (76, 15014), (78, 15029), (87, 15140),

Gene: LittleTokyo_19 Start: 14585, Stop: 15535, Start Num: 9

Candidate Starts for LittleTokyo_19:

(7, 14576), (Start: 9 @14585 has 2 MA's), (Start: 10 @14588 has 31 MA's), (16, 14654), (17, 14657), (21, 14681), (22, 14687), (23, 14696), (25, 14729), (28, 14750), (32, 14816), (35, 14852), (44, 14894), (47, 14930), (48, 14942), (49, 14948), (63, 15062), (66, 15170), (71, 15284), (74, 15335), (77, 15353), (87, 15473), (89, 15485), (90, 15494), (91, 15509),

Gene: Lunar_20 Start: 14633, Stop: 15586, Start Num: 10

Candidate Starts for Lunar_20:

(1, 14417), (4, 14570), (Start: 8 @14627 has 6 MA's), (Start: 10 @14633 has 31 MA's), (16, 14708), (18, 14717), (20, 14732), (22, 14741), (25, 14783), (26, 14786), (28, 14804), (29, 14846), (30, 14852), (42, 14933), (46, 14984), (47, 14987), (48, 14999), (53, 15044), (59, 15098), (64, 15146), (65, 15194), (67, 15260), (74, 15389), (76, 15401), (78, 15416), (79, 15419), (86, 15503), (87, 15527), (88, 15530), (91, 15563),

Gene: Melons_20 Start: 14627, Stop: 15586, Start Num: 8

Candidate Starts for Melons_20:

(1, 14417), (4, 14570), (Start: 8 @14627 has 6 MA's), (Start: 10 @14633 has 31 MA's), (16, 14708), (18, 14717), (20, 14732), (22, 14741), (25, 14783), (26, 14786), (28, 14804), (29, 14846), (30, 14852), (42, 14933), (46, 14984), (47, 14987), (48, 14999), (53, 15044), (59, 15098), (64, 15146), (65, 15194), (67, 15260), (74, 15389), (76, 15401), (78, 15416), (79, 15419), (86, 15503), (87, 15527), (88, 15530), (91, 15563),

Gene: MidnightRain_22 Start: 16932, Stop: 17891, Start Num: 10

Candidate Starts for MidnightRain_22:

(Start: 10 @16932 has 31 MA's), (11, 16941), (36, 17196), (37, 17202), (38, 17211), (41, 17217), (43, 17238), (56, 17367), (68, 17607), (73, 17649), (74, 17694), (83, 17781), (92, 17874),

Gene: Orcanus_19 Start: 15585, Stop: 16523, Start Num: 10

Candidate Starts for Orcanus_19:

(Start: 10 @15585 has 31 MA's), (16, 15651), (18, 15660), (19, 15669), (25, 15726), (26, 15729), (28, 15747), (30, 15795), (34, 15840), (35, 15849), (46, 15924), (48, 15939), (49, 15945), (53, 15984), (58, 16029), (72, 16278), (78, 16353), (81, 16398), (87, 16464), (89, 16476), (91, 16500),

Gene: Peas_21 Start: 16939, Stop: 17895, Start Num: 10

Candidate Starts for Peas_21:

(Start: 10 @16939 has 31 MA's), (14, 16960), (24, 17053), (37, 17209), (40, 17221), (48, 17296), (56, 17374), (61, 17407), (62, 17416), (68, 17611), (74, 17698), (92, 17878),

Gene: PeggyLeg03_21 Start: 16977, Stop: 17933, Start Num: 10

Candidate Starts for PeggyLeg03_21:

(3, 16905), (6, 16950), (Start: 10 @16977 has 31 MA's), (12, 16989), (14, 16998), (37, 17247), (48, 17334), (56, 17412), (62, 17454), (68, 17649), (74, 17736), (83, 17823), (92, 17916),

Gene: Persistence_21 Start: 16854, Stop: 17816, Start Num: 10

Candidate Starts for Persistence_21:

(2, 16743), (3, 16782), (5, 16803), (6, 16827), (Start: 10 @16854 has 31 MA's), (11, 16863), (14, 16875), (15, 16908), (30, 17064), (33, 17091), (37, 17124), (43, 17160), (48, 17217), (56, 17295), (76, 17631), (78, 17646), (80, 17652), (86, 17733), (92, 17799),

Gene: PhluffyCoco_18 Start: 14180, Stop: 15139, Start Num: 10

Candidate Starts for PhluffyCoco_18:

(Start: 10 @14180 has 31 MA's), (16, 14252), (21, 14279), (23, 14294), (28, 14348), (30, 14396), (35, 14450), (42, 14477), (48, 14543), (49, 14549), (53, 14588), (55, 14609), (60, 14651), (74, 14942), (75, 14951), (76, 14954), (78, 14969), (84, 15032), (87, 15080),

Gene: Phrank15_22 Start: 16867, Stop: 17826, Start Num: 10

Candidate Starts for Phrank15_22:

(Start: 10 @16867 has 31 MA's), (11, 16876), (14, 16888), (36, 17131), (37, 17137), (38, 17146), (41, 17152), (43, 17173), (56, 17302), (68, 17542), (73, 17584), (74, 17629), (83, 17716), (92, 17809),

Gene: Polka_19 Start: 14469, Stop: 15428, Start Num: 8

Candidate Starts for Polka_19:

(Start: 8 @14469 has 6 MA's), (Start: 10 @14475 has 31 MA's), (16, 14550), (18, 14559), (20, 14574), (26, 14628), (28, 14646), (29, 14688), (30, 14694), (42, 14775), (46, 14826), (47, 14829), (48, 14841), (53, 14886), (59, 14940), (64, 14988), (65, 15036), (67, 15102), (74, 15231), (76, 15243), (78, 15258), (79, 15261), (86, 15345), (87, 15369), (88, 15372), (91, 15405),

Gene: Pucara_21 Start: 16938, Stop: 17894, Start Num: 10

Candidate Starts for Pucara_21:

(6, 16911), (Start: 10 @16938 has 31 MA's), (14, 16959), (24, 17052), (37, 17208), (40, 17220), (48, 17295), (56, 17373), (61, 17406), (62, 17415), (68, 17610), (74, 17697), (92, 17877),

Gene: RadFad_22 Start: 16933, Stop: 17892, Start Num: 10

Candidate Starts for RadFad_22:

(Start: 10 @16933 has 31 MA's), (11, 16942), (36, 17197), (37, 17203), (38, 17212), (41, 17218), (43, 17239), (56, 17368), (68, 17608), (74, 17695), (76, 17707), (83, 17782), (85, 17788), (92, 17875),

Gene: Raphaella_23 Start: 16933, Stop: 17892, Start Num: 10

Candidate Starts for Raphaella_23:

(Start: 10 @16933 has 31 MA's), (11, 16942), (36, 17197), (37, 17203), (38, 17212), (41, 17218), (43, 17239), (56, 17368), (68, 17608), (74, 17695), (83, 17782), (92, 17875),

Gene: RedFox_18 Start: 14180, Stop: 15139, Start Num: 10

Candidate Starts for RedFox_18:

(Start: 10 @14180 has 31 MA's), (16, 14252), (21, 14279), (23, 14294), (28, 14348), (30, 14396), (35, 14450), (42, 14477), (48, 14543), (49, 14549), (53, 14588), (55, 14609), (60, 14651), (74, 14942), (75, 14951), (76, 14954), (78, 14969), (84, 15032), (87, 15080),

Gene: Renna12_19 Start: 14524, Stop: 15489, Start Num: 10

Candidate Starts for Renna12_19:

(Start: 10 @14524 has 31 MA's), (16, 14596), (20, 14620), (21, 14623), (23, 14638), (26, 14674), (28, 14692), (30, 14740), (35, 14794), (42, 14821), (48, 14887), (49, 14893), (74, 15292), (76, 15304), (78, 15319), (84, 15382), (86, 15406), (87, 15430),

Gene: Richie_22 Start: 16948, Stop: 17907, Start Num: 10

Candidate Starts for Richie_22:

(Start: 10 @16948 has 31 MA's), (11, 16957), (14, 16969), (36, 17212), (37, 17218), (38, 17227), (41, 17233), (43, 17254), (56, 17383), (68, 17623), (74, 17710), (80, 17743), (83, 17797), (92, 17890),

Gene: Ruchi_19 Start: 15868, Stop: 16809, Start Num: 10

Candidate Starts for Ruchi_19:

(Start: 9 @15865 has 2 MA's), (Start: 10 @15868 has 31 MA's), (13, 15886), (16, 15934), (20, 15958), (22, 15967), (25, 16009), (27, 16027), (28, 16030), (30, 16078), (39, 16150), (48, 16222), (59, 16321), (78, 16639), (81, 16684), (82, 16696), (87, 16750),

Gene: Sakai_22 Start: 16942, Stop: 17901, Start Num: 10

Candidate Starts for Sakai_22:

(Start: 10 @16942 has 31 MA's), (11, 16951), (36, 17206), (37, 17212), (38, 17221), (41, 17227), (43, 17248), (56, 17377), (68, 17617), (74, 17704), (83, 17791), (92, 17884),

Gene: Seahorse_23 Start: 17300, Stop: 18259, Start Num: 10

Candidate Starts for Seahorse_23:

(Start: 10 @17300 has 31 MA's), (11, 17309), (14, 17321), (37, 17570), (38, 17579), (41, 17585), (43, 17606), (56, 17735), (74, 18062), (92, 18242),

Gene: TaylorSipht_19 Start: 14602, Stop: 15540, Start Num: 10

Candidate Starts for TaylorSipht_19:

(Start: 10 @14602 has 31 MA's), (16, 14668), (18, 14677), (22, 14701), (25, 14743), (28, 14764), (30, 14812), (53, 15001), (57, 15034), (58, 15046), (72, 15295), (87, 15481), (89, 15493), (91, 15517),

Gene: Tiff81_24 Start: 17028, Stop: 17987, Start Num: 10

Candidate Starts for Tiff81_24:

(Start: 10 @17028 has 31 MA's), (11, 17037), (14, 17049), (36, 17292), (37, 17298), (38, 17307), (41, 17313), (43, 17334), (56, 17463), (74, 17790), (92, 17970),

Gene: Vulpecula_19 Start: 15323, Stop: 16267, Start Num: 9

Candidate Starts for Vulpecula_19:

(Start: 9 @15323 has 2 MA's), (Start: 10 @15326 has 31 MA's), (13, 15344), (16, 15392), (20, 15416), (22, 15425), (25, 15467), (27, 15485), (28, 15488), (30, 15536), (39, 15608), (48, 15680), (59, 15779), (78, 16097), (81, 16142), (87, 16208),

Gene: YoungHarleezy_22 Start: 16946, Stop: 17905, Start Num: 10

Candidate Starts for YoungHarleezy_22:

(Start: 10 @16946 has 31 MA's), (11, 16955), (36, 17210), (37, 17216), (38, 17225), (41, 17231), (43, 17252), (56, 17381), (68, 17621), (73, 17663), (74, 17708), (83, 17795), (92, 17888),