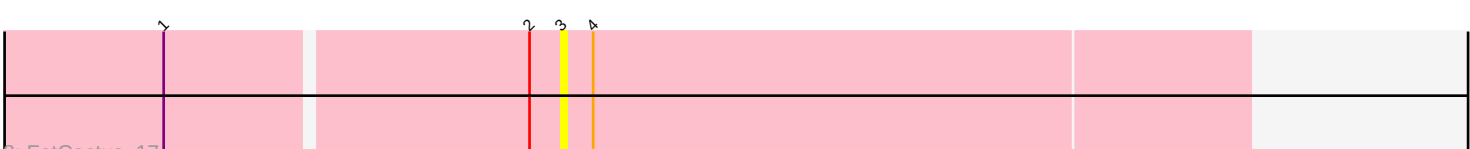
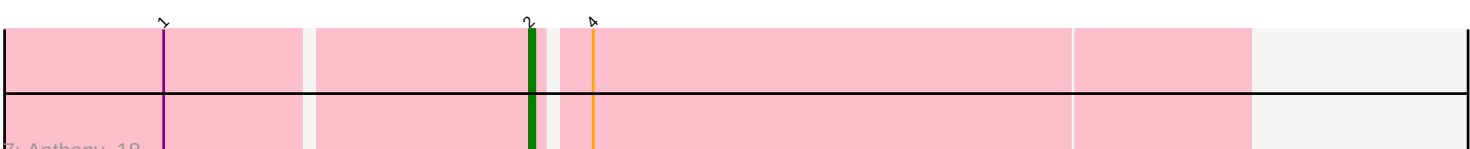
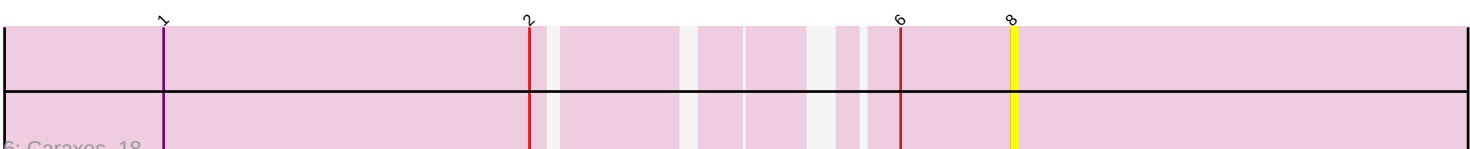
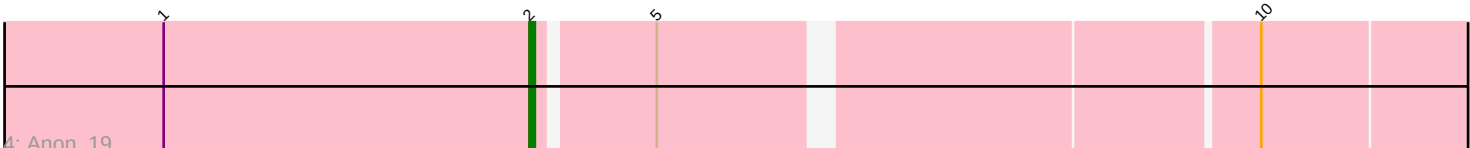


Pham 280248



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 280248 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280248 has 113 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Nebulosus_21, Epsocamisio_21, Remus_21, Ravana_22, KatherineG_21, DekHockey33_21, MinecraftSteve_22, ReMo_21, Looper_22, Battleship_22, LastResort_21, Oofda_21, JSwag_21, Waits_21, Boohoo_21, ShayRa_22, Strosahl_21, Anaysia_21, Warrior24_21, Rosalind_21, Soups_21
- Track 2 : Nedarya_20
- Track 3 : Elle_19
- Track 4 : Anon_19
- Track 5 : Switzerland_21
- Track 6 : Caraxes_18
- Track 7 : Anthony_18
- Track 8 : FatCactus_17
- Track 9 : Manu_21, Phranny_21, Calvinny_21, PhishRPhriends_19, Pawn_20, PurpleHaze_20, Kalb97_21, JeppNRM_21, ACFishhook_20, Kalnoky_21, OlanP_20, Heliosoles_20, Marius_21, HaveUMetTed_21, Gemma_20, Reba_21, Groupthink_21
- Track 10 : GtownJaz_20, MoneyMay_20, Grif_20, BuzzBuzz_19, Tiffany_20, Marie_20, HashRod_21, Anubis_22, Colbster_20, DaHudson_20, SoYo_20, Stagni_20, Sabinator_20, Bxz2_19, Beauxregard13_20, LugYA_22, Penny1_20, EpicPhail_20, Louie6_20, KADY_21, JenCasNa_20, LarryKay_20, Misomonster_22, Iowa_20, Montavir_19, Mainiac_20, Snickers_20, Daishi_19, MadMarie_20, Pembroke_20, Ollie_20, PotatoSplit_21, Cullens_20, SoilDragon_20, Farber_20, Aglet_20, Phoxy_20, Malinsilva_22, Wooldri_22, PGHhamlin_22, MarQuardt_20, Gwennie_19, Watson_20, Spike509_20, Phoebe_20, AugsMagnumOpus_22, Microwolf_20, Fernando_20, Hercules11_20, P28Green_20, Grum1_20, Sabia_20, Jobu08_20, Bigflo_20, Lilith_20, AgronaGT15_20, Zetzy_19, Vix_20, GingkoMaracino_20, Taurus_20, Dieselweasel_20, LBerry_20, Rummer_20, Grub_20, TinyPebbles_20, MuchMore_22, BreSam8_20, JHC117_20

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

The start number called the most often in the published annotations is 2, it was called in 104 of the 104 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook_20, Aglet_20, AgronaGT15_20, Anaysia_21, Anon_19, Anthony_18, Anubis_22, AugsMagnumOpus_22, Battleship_22, Beauxregard13_20, Bigflo_20, Boohoo_21, BreSam8_20, BuzzBuzz_19, Bxz2_191, Calvinny_21, Colbster_20, Cullens_20, DaHudson_20, Daishi_19, DekHockey33_21, Dieselweasel_20, Elle_19, EpicPhail_20, Epsocamisio_21, Farber_20, Fernando_20, Gemma_20, GingkoMaracino_20, Grif_20, Groupthink_21, Grub_20, Grum1_20, GtownJaz_20, Gwennie_19, HashRod_21, HaveUMetTed_21, Heliosoles_20, Hercules11_20, JHC117_20, JSwag_21, JenCasNa_20, JeppNRM_21, Jobu08_20, KADY_21, Kalb97_21, Kalnoky_21, KatherineG_21, LBerry_20, LarryKay_20, LastResort_21, Lilith_20, Looper_22, Louie6_20, Lowa_20, LugYA_22, MadMarie_20, Mainiac_20, Malinsilva_22, Manu_21, MarQuardt_20, Marie_20, Marius_21, Microwolf_20, MinecraftSteve_22, Misomonster_22, MoneyMay_20, Montavir_19, MuchMore_22, Nebulosus_21, Nedarya_20, OlanP_20, Ollie_20, Oofda_21, P28Green_20, PGHhamlin_22, Pawn_20, Pembroke_20, Penny1_20, PhishRPhriends_19, Phoebe_20, Phoxy_20, Phranny_21, PotatoSplit_21, PurpleHaze_20, Ravana_22, ReMo_21, Reba_21, Remus_21, Rosalind_21, Rummer_20, Sabia_20, Sabinator_20, ShayRa_22, Snickers_20, SoYo_20, SoilDragon_20, Soups_21, Spike509_20, Stagni_20, Strosahl_21, Switzerland_21, Taurus_20, Tiffany_20, TinyPebbles_20, Vix_20, Waits_21, Warrior24_21, Watson_20, Wooldri_22, Zetzy_19,

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

- Caraxes_18, FatCactus_17,

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

-

Summary by start number:

Start 2:

- Found in 113 of 113 (100.0%) of genes in pham
- Manual Annotations of this start: 104 of 104
- Called 98.2% of time when present
- Phage (with cluster) where this start called: ACFishhook_20 (A3), Aglet_20 (A3), AgronaGT15_20 (A3), Anaysia_21 (A15), Anon_19 (A15), Anthony_18 (A20), Anubis_22 (A3), AugsMagnumOpus_22 (A3), Battleship_22 (A15), Beauxregard13_20 (A3), Bigflo_20 (A3), Boohoo_21 (A15), BreSam8_20 (A3), BuzzBuzz_19 (A3), Bxz2_191 (A3), Calvinny_21 (A3), Colbster_20 (A3), Cullens_20 (A3), DaHudson_20 (A3), Daishi_19 (A3), DekHockey33_21 (A15), Dieselweasel_20 (A3), Elle_19 (A15), EpicPhail_20 (A3), Epsocamisio_21 (A15), Farber_20 (A3), Fernando_20 (A3), Gemma_20 (A3), GingkoMaracino_20 (A3), Grif_20 (A3), Groupthink_21 (A3), Grub_20 (A3), Grum1_20 (A3), GtownJaz_20 (A3), Gwennie_19 (A3), HashRod_21 (A3), HaveUMetTed_21 (A3), Heliosoles_20 (A3), Hercules11_20 (A3), JHC117_20 (A3), JSwag_21 (A15), JenCasNa_20 (A3), JeppNRM_21 (A3), Jobu08_20 (A3), KADY_21 (A3), Kalb97_21 (A3), Kalnoky_21 (A3), KatherineG_21 (A15), LBerry_20 (A3), LarryKay_20 (A3), LastResort_21 (A15), Lilith_20 (A3), Looper_22 (A15), Louie6_20 (A3), Lowa_20 (A3), LugYA_22 (A3), MadMarie_20 (A3), Mainiac_20 (A3), Malinsilva_22 (A3), Manu_21 (A3), MarQuardt_20 (A3), Marie_20 (A3), Marius_21 (A3), Microwolf_20 (A3), MinecraftSteve_22 (A15), Misomonster_22 (A3), MoneyMay_20 (A3), Montavir_19 (A3), MuchMore_22 (A3), Nebulosus_21 (A15), Nedarya_20 (A15), OlanP_20 (A3), Ollie_20 (A3), Oofda_21 (A15), P28Green_20 (A3), PGHhamlin_22 (A3), Pawn_20 (A3), Pembroke_20 (A3), Penny1_20 (A3), PhishRPhriends_19 (A3), Phoebe_20 (A3), Phoxy_20 (A3),

Phranny_21 (A3), PotatoSplit_21 (A3), PurpleHaze_20 (A3), Ravana_22 (A15), ReMo_21 (A15), Reba_21 (A3), Remus_21 (A15), Rosalind_21 (A15), Rummer_20 (A3), Sabia_20 (A3), Sabinator_20 (A3), ShayRa_22 (A15), Snickers_20 (A3), SoYo_20 (A3), SoilDragon_20 (A3), Soups_21 (A15), Spike509_20 (A3), Stagni_20 (A3), Strosahl_21 (A15), Switzerland_21 (A15), Taurus_20 (A3), Tiffany_20 (A3), TinyPebbles_20 (A3), Vix_20 (A3), Waits_21 (A15), Warrior24_21 (A15), Watson_20 (A3), Wooldri_22 (A3), Zetzy_19 (A3),

Start 3:

- Found in 1 of 113 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FatCactus_17 (A20),

Start 8:

- Found in 1 of 113 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caraxes_18 (A2),

Summary by clusters:

There are 4 clusters represented in this pham: A15, A20, A3, A2,

Info for manual annotations of cluster A15:

- Start number 2 was manually annotated 23 times for cluster A15.

Info for manual annotations of cluster A20:

- Start number 2 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 2 was manually annotated 80 times for cluster A3.

Gene Information:

Gene: ACFishhook_20 Start: 13319, Stop: 13453, Start Num: 2

Candidate Starts for ACFishhook_20:

(1, 13253), (Start: 2 @13319 has 104 MA's), (9, 13433),

Gene: Aglet_20 Start: 13165, Stop: 13299, Start Num: 2

Candidate Starts for Aglet_20:

(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: AgronaGT15_20 Start: 13072, Stop: 13206, Start Num: 2

Candidate Starts for AgronaGT15_20:

(1, 13006), (Start: 2 @13072 has 104 MA's), (9, 13186),

Gene: Anaysia_21 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for Anaysia_21:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Anon_19 Start: 13210, Stop: 13380, Start Num: 2
Candidate Starts for Anon_19:
(1, 13141), (Start: 2 @13210 has 104 MA's), (5, 13231), (10, 13336),

Gene: Anthony_18 Start: 11969, Stop: 12100, Start Num: 2
Candidate Starts for Anthony_18:
(1, 11903), (Start: 2 @11969 has 104 MA's), (4, 11978),

Gene: Anubis_22 Start: 13050, Stop: 13184, Start Num: 2
Candidate Starts for Anubis_22:
(1, 12984), (Start: 2 @13050 has 104 MA's), (9, 13164),

Gene: AugsMagnumOpus_22 Start: 13156, Stop: 13290, Start Num: 2
Candidate Starts for AugsMagnumOpus_22:
(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Battleship_22 Start: 12979, Stop: 13176, Start Num: 2
Candidate Starts for Battleship_22:
(1, 12910), (Start: 2 @12979 has 104 MA's), (5, 13000), (9, 13084),

Gene: Beauxregard13_20 Start: 13164, Stop: 13298, Start Num: 2
Candidate Starts for Beauxregard13_20:
(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: Bigflo_20 Start: 13162, Stop: 13296, Start Num: 2
Candidate Starts for Bigflo_20:
(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Boohoo_21 Start: 12864, Stop: 13061, Start Num: 2
Candidate Starts for Boohoo_21:
(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: BreSam8_20 Start: 13157, Stop: 13291, Start Num: 2
Candidate Starts for BreSam8_20:
(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: BuzzBuzz_19 Start: 13248, Stop: 13382, Start Num: 2
Candidate Starts for BuzzBuzz_19:
(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: Bxz2_191 Start: 13258, Stop: 13392, Start Num: 2
Candidate Starts for Bxz2_191:
(1, 13192), (Start: 2 @13258 has 104 MA's), (9, 13372),

Gene: Calvinny_21 Start: 13238, Stop: 13372, Start Num: 2
Candidate Starts for Calvinny_21:
(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: Caraxes_18 Start: 12468, Stop: 12587, Start Num: 8
Candidate Starts for Caraxes_18:
(1, 12324), (Start: 2 @12393 has 104 MA's), (6, 12447), (8, 12468),

Gene: Colbster_20 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for Colbster_20:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: Cullens_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for Cullens_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: DaHudson_20 Start: 13156, Stop: 13290, Start Num: 2

Candidate Starts for DaHudson_20:

(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Daishi_19 Start: 12089, Stop: 12223, Start Num: 2

Candidate Starts for Daishi_19:

(1, 12023), (Start: 2 @12089 has 104 MA's), (9, 12203),

Gene: DekHockey33_21 Start: 12986, Stop: 13183, Start Num: 2

Candidate Starts for DekHockey33_21:

(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: Dieselweasel_20 Start: 13165, Stop: 13299, Start Num: 2

Candidate Starts for Dieselweasel_20:

(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: Elle_19 Start: 12578, Stop: 12748, Start Num: 2

Candidate Starts for Elle_19:

(1, 12509), (Start: 2 @12578 has 104 MA's), (5, 12599), (7, 12641), (10, 12704),

Gene: EpicPhail_20 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for EpicPhail_20:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: Epsocamisio_21 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for Epsocamisio_21:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Farber_20 Start: 13157, Stop: 13291, Start Num: 2

Candidate Starts for Farber_20:

(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: FatCactus_17 Start: 11903, Stop: 12031, Start Num: 3

Candidate Starts for FatCactus_17:

(1, 11834), (Start: 2 @11900 has 104 MA's), (3, 11903), (4, 11909),

Gene: Fernando_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for Fernando_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Gemma_20 Start: 13238, Stop: 13372, Start Num: 2

Candidate Starts for Gemma_20:

(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: GingkoMaracino_20 Start: 13050, Stop: 13184, Start Num: 2

Candidate Starts for GingkoMaracino_20:

(1, 12984), (Start: 2 @13050 has 104 MA's), (9, 13164),

Gene: Grif_20 Start: 13247, Stop: 13381, Start Num: 2

Candidate Starts for Grif_20:

(1, 13181), (Start: 2 @13247 has 104 MA's), (9, 13361),

Gene: Groupthink_21 Start: 13238, Stop: 13372, Start Num: 2

Candidate Starts for Groupthink_21:

(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: Grub_20 Start: 13156, Stop: 13290, Start Num: 2

Candidate Starts for Grub_20:

(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Grum1_20 Start: 13157, Stop: 13291, Start Num: 2

Candidate Starts for Grum1_20:

(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: GtownJaz_20 Start: 13165, Stop: 13299, Start Num: 2

Candidate Starts for GtownJaz_20:

(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: Gwennie_19 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for Gwennie_19:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: HashRod_21 Start: 13248, Stop: 13382, Start Num: 2

Candidate Starts for HashRod_21:

(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: HaveUMetTed_21 Start: 13232, Stop: 13366, Start Num: 2

Candidate Starts for HaveUMetTed_21:

(1, 13166), (Start: 2 @13232 has 104 MA's), (9, 13346),

Gene: Heliosoles_20 Start: 13238, Stop: 13372, Start Num: 2

Candidate Starts for Heliosoles_20:

(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: Hercules11_20 Start: 13171, Stop: 13305, Start Num: 2

Candidate Starts for Hercules11_20:

(1, 13105), (Start: 2 @13171 has 104 MA's), (9, 13285),

Gene: JHC117_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for JHC117_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: JSwag_21 Start: 12850, Stop: 13047, Start Num: 2

Candidate Starts for JSwag_21:

(1, 12781), (Start: 2 @12850 has 104 MA's), (5, 12871), (9, 12955),

Gene: JenCasNa_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for JenCasNa_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: JeppNRM_21 Start: 13236, Stop: 13370, Start Num: 2

Candidate Starts for JeppNRM_21:

(1, 13170), (Start: 2 @13236 has 104 MA's), (9, 13350),

Gene: Jobu08_20 Start: 13231, Stop: 13365, Start Num: 2

Candidate Starts for Jobu08_20:

(1, 13165), (Start: 2 @13231 has 104 MA's), (9, 13345),

Gene: KADY_21 Start: 13248, Stop: 13382, Start Num: 2

Candidate Starts for KADY_21:

(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: Kalb97_21 Start: 13236, Stop: 13370, Start Num: 2

Candidate Starts for Kalb97_21:

(1, 13170), (Start: 2 @13236 has 104 MA's), (9, 13350),

Gene: Kalnoky_21 Start: 13238, Stop: 13372, Start Num: 2

Candidate Starts for Kalnoky_21:

(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: KatherineG_21 Start: 12986, Stop: 13183, Start Num: 2

Candidate Starts for KatherineG_21:

(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: LBerry_20 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for LBerry_20:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: LarryKay_20 Start: 13250, Stop: 13384, Start Num: 2

Candidate Starts for LarryKay_20:

(1, 13184), (Start: 2 @13250 has 104 MA's), (9, 13364),

Gene: LastResort_21 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for LastResort_21:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Lilith_20 Start: 13157, Stop: 13291, Start Num: 2

Candidate Starts for Lilith_20:

(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: Looper_22 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for Looper_22:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Louie6_20 Start: 13251, Stop: 13385, Start Num: 2

Candidate Starts for Louie6_20:

(1, 13185), (Start: 2 @13251 has 104 MA's), (9, 13365),

Gene: Lowa_20 Start: 13156, Stop: 13290, Start Num: 2

Candidate Starts for Lowa_20:

(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: LugYA_22 Start: 13162, Stop: 13296, Start Num: 2
Candidate Starts for LugYA_22:
(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: MadMarie_20 Start: 13166, Stop: 13300, Start Num: 2
Candidate Starts for MadMarie_20:
(1, 13100), (Start: 2 @13166 has 104 MA's), (9, 13280),

Gene: Mainiac_20 Start: 13157, Stop: 13291, Start Num: 2
Candidate Starts for Mainiac_20:
(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: Malinsilva_22 Start: 13156, Stop: 13290, Start Num: 2
Candidate Starts for Malinsilva_22:
(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Manu_21 Start: 13238, Stop: 13372, Start Num: 2
Candidate Starts for Manu_21:
(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: MarQuardt_20 Start: 13165, Stop: 13299, Start Num: 2
Candidate Starts for MarQuardt_20:
(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: Marie_20 Start: 13162, Stop: 13296, Start Num: 2
Candidate Starts for Marie_20:
(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Marius_21 Start: 13238, Stop: 13372, Start Num: 2
Candidate Starts for Marius_21:
(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: Microwolf_20 Start: 13165, Stop: 13299, Start Num: 2
Candidate Starts for Microwolf_20:
(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: MinecraftSteve_22 Start: 12986, Stop: 13183, Start Num: 2
Candidate Starts for MinecraftSteve_22:
(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: Misomonster_22 Start: 13247, Stop: 13381, Start Num: 2
Candidate Starts for Misomonster_22:
(1, 13181), (Start: 2 @13247 has 104 MA's), (9, 13361),

Gene: MoneyMay_20 Start: 13162, Stop: 13296, Start Num: 2
Candidate Starts for MoneyMay_20:
(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Montavir_19 Start: 13164, Stop: 13298, Start Num: 2
Candidate Starts for Montavir_19:
(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: MuchMore_22 Start: 13156, Stop: 13290, Start Num: 2

Candidate Starts for MuchMore_22:

(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Nebulosus_21 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for Nebulosus_21:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Nedarya_20 Start: 13453, Stop: 13650, Start Num: 2

Candidate Starts for Nedarya_20:

(1, 13384), (Start: 2 @13453 has 104 MA's), (11, 13588),

Gene: OlanP_20 Start: 13418, Stop: 13552, Start Num: 2

Candidate Starts for OlanP_20:

(1, 13352), (Start: 2 @13418 has 104 MA's), (9, 13532),

Gene: Ollie_20 Start: 13035, Stop: 13169, Start Num: 2

Candidate Starts for Ollie_20:

(1, 12969), (Start: 2 @13035 has 104 MA's), (9, 13149),

Gene: Oofda_21 Start: 12835, Stop: 13032, Start Num: 2

Candidate Starts for Oofda_21:

(1, 12766), (Start: 2 @12835 has 104 MA's), (5, 12856), (9, 12940),

Gene: P28Green_20 Start: 13163, Stop: 13297, Start Num: 2

Candidate Starts for P28Green_20:

(1, 13097), (Start: 2 @13163 has 104 MA's), (9, 13277),

Gene: PGHhamlin_22 Start: 13156, Stop: 13290, Start Num: 2

Candidate Starts for PGHhamlin_22:

(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Pawn_20 Start: 13238, Stop: 13372, Start Num: 2

Candidate Starts for Pawn_20:

(1, 13172), (Start: 2 @13238 has 104 MA's), (9, 13352),

Gene: Pembroke_20 Start: 13165, Stop: 13299, Start Num: 2

Candidate Starts for Pembroke_20:

(1, 13099), (Start: 2 @13165 has 104 MA's), (9, 13279),

Gene: Penny1_20 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for Penny1_20:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: PhishRPhriends_19 Start: 12423, Stop: 12557, Start Num: 2

Candidate Starts for PhishRPhriends_19:

(1, 12357), (Start: 2 @12423 has 104 MA's), (9, 12537),

Gene: Phoebe_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for Phoebe_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Phoxy_20 Start: 13248, Stop: 13382, Start Num: 2

Candidate Starts for Phoxy_20:

(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: Phranny_21 Start: 13230, Stop: 13364, Start Num: 2

Candidate Starts for Phranny_21:

(1, 13164), (Start: 2 @13230 has 104 MA's), (9, 13344),

Gene: PotatoSplit_21 Start: 13164, Stop: 13298, Start Num: 2

Candidate Starts for PotatoSplit_21:

(1, 13098), (Start: 2 @13164 has 104 MA's), (9, 13278),

Gene: PurpleHaze_20 Start: 13237, Stop: 13371, Start Num: 2

Candidate Starts for PurpleHaze_20:

(1, 13171), (Start: 2 @13237 has 104 MA's), (9, 13351),

Gene: Ravana_22 Start: 12825, Stop: 13022, Start Num: 2

Candidate Starts for Ravana_22:

(1, 12756), (Start: 2 @12825 has 104 MA's), (5, 12846), (9, 12930),

Gene: ReMo_21 Start: 12864, Stop: 13061, Start Num: 2

Candidate Starts for ReMo_21:

(1, 12795), (Start: 2 @12864 has 104 MA's), (5, 12885), (9, 12969),

Gene: Reba_21 Start: 12903, Stop: 13037, Start Num: 2

Candidate Starts for Reba_21:

(1, 12837), (Start: 2 @12903 has 104 MA's), (9, 13017),

Gene: Remus_21 Start: 12825, Stop: 13022, Start Num: 2

Candidate Starts for Remus_21:

(1, 12756), (Start: 2 @12825 has 104 MA's), (5, 12846), (9, 12930),

Gene: Rosalind_21 Start: 12986, Stop: 13183, Start Num: 2

Candidate Starts for Rosalind_21:

(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: Rummer_20 Start: 13248, Stop: 13382, Start Num: 2

Candidate Starts for Rummer_20:

(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: Sabia_20 Start: 13157, Stop: 13291, Start Num: 2

Candidate Starts for Sabia_20:

(1, 13091), (Start: 2 @13157 has 104 MA's), (9, 13271),

Gene: Sabinator_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for Sabinator_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: ShayRa_22 Start: 12986, Stop: 13183, Start Num: 2

Candidate Starts for ShayRa_22:

(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: Snickers_20 Start: 13138, Stop: 13272, Start Num: 2

Candidate Starts for Snickers_20:

(1, 13072), (Start: 2 @13138 has 104 MA's), (9, 13252),

Gene: SoYo_20 Start: 13075, Stop: 13209, Start Num: 2

Candidate Starts for SoYo_20:

(1, 13009), (Start: 2 @13075 has 104 MA's), (9, 13189),

Gene: SoilDragon_20 Start: 12847, Stop: 12981, Start Num: 2

Candidate Starts for SoilDragon_20:

(1, 12781), (Start: 2 @12847 has 104 MA's), (9, 12961),

Gene: Soups_21 Start: 12986, Stop: 13183, Start Num: 2

Candidate Starts for Soups_21:

(1, 12917), (Start: 2 @12986 has 104 MA's), (5, 13007), (9, 13091),

Gene: Spike509_20 Start: 13248, Stop: 13382, Start Num: 2

Candidate Starts for Spike509_20:

(1, 13182), (Start: 2 @13248 has 104 MA's), (9, 13362),

Gene: Stagni_20 Start: 13166, Stop: 13300, Start Num: 2

Candidate Starts for Stagni_20:

(1, 13100), (Start: 2 @13166 has 104 MA's), (9, 13280),

Gene: Strosahl_21 Start: 12825, Stop: 13022, Start Num: 2

Candidate Starts for Strosahl_21:

(1, 12756), (Start: 2 @12825 has 104 MA's), (5, 12846), (9, 12930),

Gene: Switzerland_21 Start: 12979, Stop: 13176, Start Num: 2

Candidate Starts for Switzerland_21:

(1, 12910), (Start: 2 @12979 has 104 MA's), (5, 13000), (9, 13084),

Gene: Taurus_20 Start: 13162, Stop: 13296, Start Num: 2

Candidate Starts for Taurus_20:

(1, 13096), (Start: 2 @13162 has 104 MA's), (9, 13276),

Gene: Tiffany_20 Start: 13058, Stop: 13192, Start Num: 2

Candidate Starts for Tiffany_20:

(1, 12992), (Start: 2 @13058 has 104 MA's), (9, 13172),

Gene: TinyPebbles_20 Start: 13247, Stop: 13381, Start Num: 2

Candidate Starts for TinyPebbles_20:

(1, 13181), (Start: 2 @13247 has 104 MA's), (9, 13361),

Gene: Vix_20 Start: 13246, Stop: 13380, Start Num: 2

Candidate Starts for Vix_20:

(1, 13180), (Start: 2 @13246 has 104 MA's), (9, 13360),

Gene: Waits_21 Start: 12831, Stop: 13028, Start Num: 2

Candidate Starts for Waits_21:

(1, 12762), (Start: 2 @12831 has 104 MA's), (5, 12852), (9, 12936),

Gene: Warrior24_21 Start: 12835, Stop: 13032, Start Num: 2

Candidate Starts for Warrior24_21:

(1, 12766), (Start: 2 @12835 has 104 MA's), (5, 12856), (9, 12940),

Gene: Watson_20 Start: 13156, Stop: 13290, Start Num: 2
Candidate Starts for Watson_20:
(1, 13090), (Start: 2 @13156 has 104 MA's), (9, 13270),

Gene: Wooldri_22 Start: 13075, Stop: 13209, Start Num: 2
Candidate Starts for Wooldri_22:
(1, 13009), (Start: 2 @13075 has 104 MA's), (9, 13189),

Gene: Zetzy_19 Start: 12696, Stop: 12830, Start Num: 2
Candidate Starts for Zetzy_19:
(1, 12630), (Start: 2 @12696 has 104 MA's), (9, 12810),