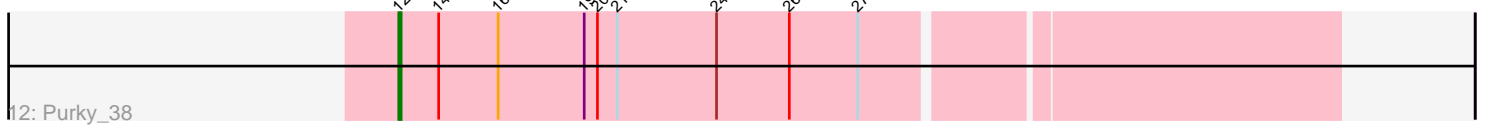
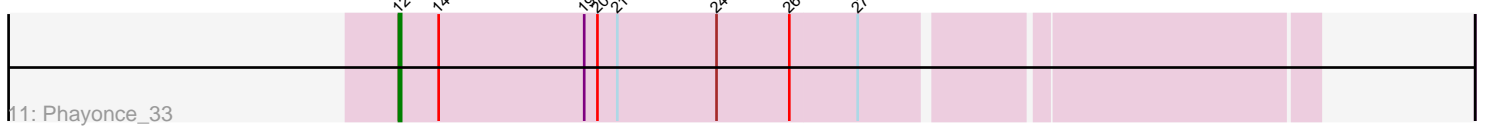
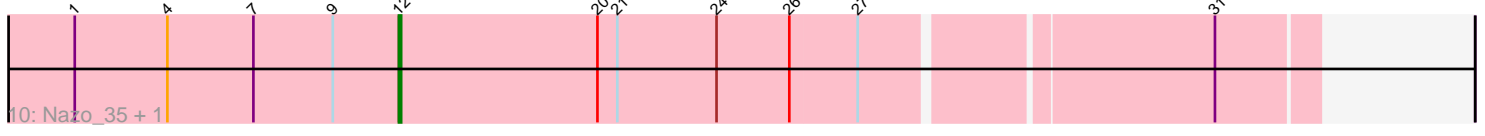
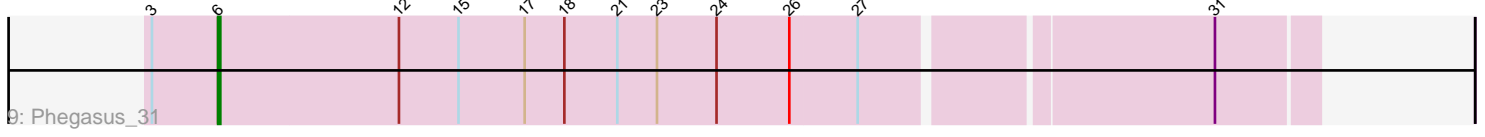
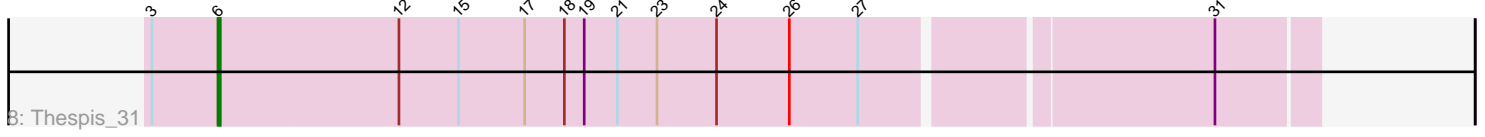
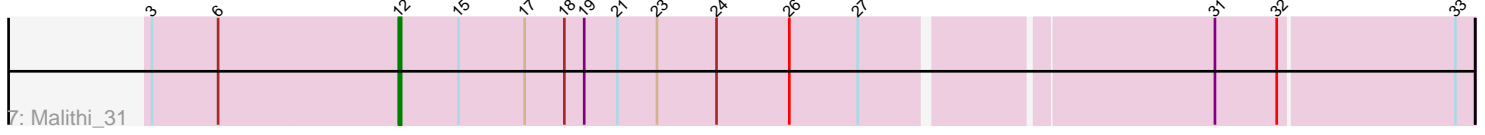
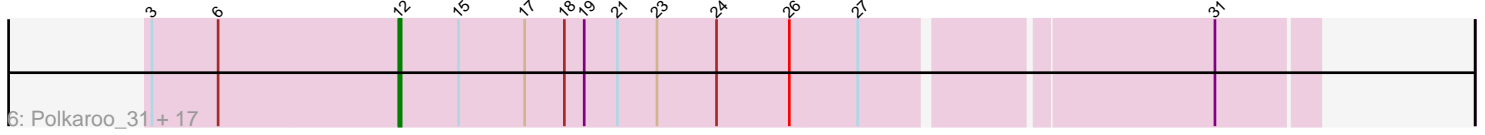
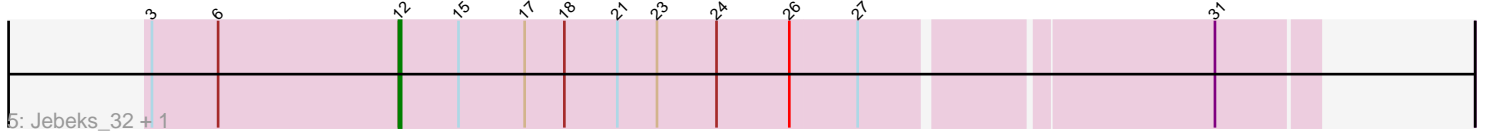
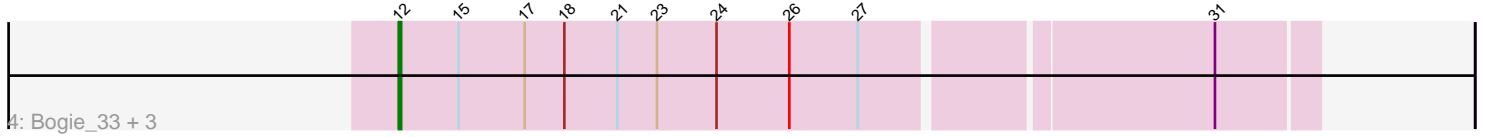
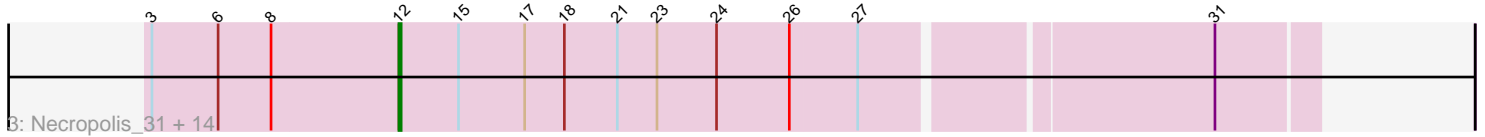
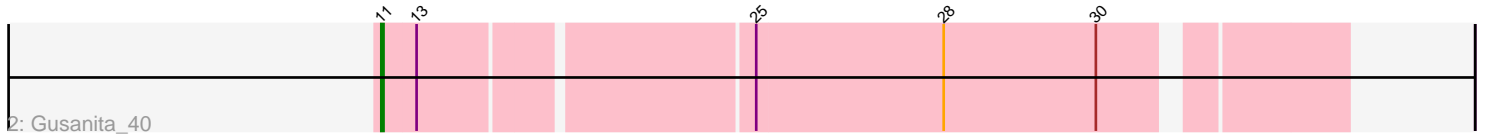
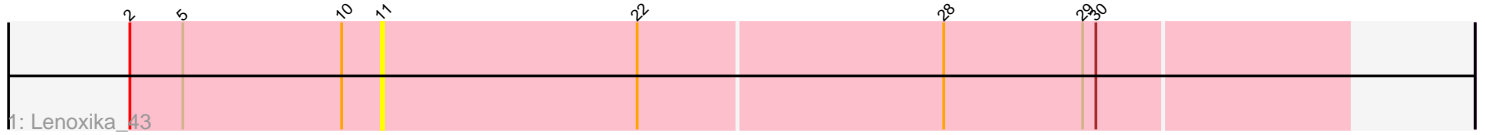


Pham 196614



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 196614 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196614 has 48 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Lenoxika_43
- Track 2 : Gusanita_40
- Track 3 : Necropolis_31, Phineas_31, Venti_31, Fishburne_31, Kari_31, Dynamo_31, Langerak_31, Donovan_31, Mangethe_31, Techage_31, Majeke_31, HUHilltop_31, Zilizebeth_31, Vidya_31, Bartholomew_30
- Track 4 : Bogie_33, Shipwreck_33, Pygmy_33, Arib1_31
- Track 5 : Jebeks_32, FirstPlacePfu_31
- Track 6 : Polkaroo_31, KilKor_31, Willsammy_30, Brusacoram_31, Phalm_31, GreaseLightnin_31, Jung_30, StevieRay_31, Camster_31, Sonah_31, StressBall_31, Bunnies_31, Atcoo_31, Glaske_31, Megiddo_31, Juniormint_31, Ksquared_31, CactusJack_31
- Track 7 : Malithi_31
- Track 8 : Thespis_31
- Track 9 : Phegasus_31
- Track 10 : Nazo_35, BigNuz_34
- Track 11 : Phayonce_33
- Track 12 : Purky_38

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

The start number called the most often in the published annotations is 12, it was called in 41 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1_31, Atcoo_31, Bartholomew_30, BigNuz_34, Bogie_33, Brusacoram_31, Bunnies_31, CactusJack_31, Camster_31, Donovan_31, Dynamo_31, FirstPlacePfu_31, Fishburne_31, Glaske_31, GreaseLightnin_31, HUHilltop_31, Jebeks_32, Jung_30, Juniormint_31, Kari_31, KilKor_31, Ksquared_31, Langerak_31, Majeke_31, Malithi_31, Mangethe_31, Megiddo_31, Nazo_35, Necropolis_31, Phalm_31, Phayonce_33, Phineas_31, Polkaroo_31, Purky_38, Pygmy_33, Shipwreck_33, Sonah_31, StevieRay_31, StressBall_31, Techage_31, Venti_31, Vidya_31, Willsammy_30, Zilizebeth_31,

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

- Phegasus_31, Thespis_31,

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

- Gusanita_40, Lenoxika_43,

Summary by start number:

Start 6:

- Found in 38 of 48 (79.2%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Phegasus_31 (P1), Thespis_31 (P1),

Start 11:

- Found in 2 of 48 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gusanita_40 (FF), Lenoxika_43 (FF),

Start 12:

- Found in 46 of 48 (95.8%) of genes in pham
- Manual Annotations of this start: 41 of 44
- Called 95.7% of time when present
- Phage (with cluster) where this start called: Arib1_31 (P1), Atcoo_31 (P1), Bartholomew_30 (P1), BigNuz_34 (P4), Bogie_33 (P1), Brusacoram_31 (P1), Bunnies_31 (P1), CactusJack_31 (P1), Camster_31 (P1), Donovan_31 (P1), Dynamo_31 (P1), FirstPlacePfu_31 (P1), Fishburne_31 (P1), Glaske_31 (P1), GreaseLightnin_31 (P1), HUHilltop_31 (P1), Jebeks_32 (P1), Jung_30 (P1), Juniormint_31 (P1), Kari_31 (P1), KilKor_31 (P1), Ksquared_31 (P1), Langerak_31 (P1), Majeke_31 (P1), Malithi_31 (P1), Mangethe_31 (P1), Megiddo_31 (P1), Nazo_35 (P4), Necropolis_31 (P1), Phalm_31 (P1), Phayonce_33 (P5), Phineas_31 (P1), Polkaroo_31 (P1), Purky_38 (P6), Pygmy_33 (P1), Shipwreck_33 (P1), Sonah_31 (P1), StevieRay_31 (P1), StressBall_31 (P1), Techage_31 (P1), Venti_31 (P1), Vidya_31 (P1), Willsammy_30 (P1), Zilizebeth_31 (P1),

Summary by clusters:

There are 5 clusters represented in this pham: P1, P6, P4, FF, P5,

Info for manual annotations of cluster FF:

- Start number 11 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster P1:

- Start number 6 was manually annotated 2 times for cluster P1.
- Start number 12 was manually annotated 37 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 12 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 12 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 12 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Arib1_31 Start: 27353, Stop: 26952, Start Num: 12

Candidate Starts for Arib1_31:

(Start: 12 @27353 has 41 MA's), (15, 27326), (17, 27296), (18, 27278), (21, 27254), (23, 27236), (24, 27209), (26, 27176), (27, 27146), (31, 26996),

Gene: Atcoo_31 Start: 27834, Stop: 27433, Start Num: 12

Candidate Starts for Atcoo_31:

(3, 27945), (Start: 6 @27915 has 2 MA's), (Start: 12 @27834 has 41 MA's), (15, 27807), (17, 27777), (18, 27759), (19, 27750), (21, 27735), (23, 27717), (24, 27690), (26, 27657), (27, 27627), (31, 27477),

Gene: Bartholomew_30 Start: 27347, Stop: 26946, Start Num: 12

Candidate Starts for Bartholomew_30:

(3, 27458), (Start: 6 @27428 has 2 MA's), (8, 27404), (Start: 12 @27347 has 41 MA's), (15, 27320), (17, 27290), (18, 27272), (21, 27248), (23, 27230), (24, 27203), (26, 27170), (27, 27140), (31, 26990),

Gene: BigNuz_34 Start: 29474, Stop: 29073, Start Num: 12

Candidate Starts for BigNuz_34:

(1, 29621), (4, 29579), (7, 29540), (9, 29504), (Start: 12 @29474 has 41 MA's), (20, 29384), (21, 29375), (24, 29330), (26, 29297), (27, 29267), (31, 29117),

Gene: Bogie_33 Start: 29130, Stop: 28729, Start Num: 12

Candidate Starts for Bogie_33:

(Start: 12 @29130 has 41 MA's), (15, 29103), (17, 29073), (18, 29055), (21, 29031), (23, 29013), (24, 28986), (26, 28953), (27, 28923), (31, 28773),

Gene: Brusacoram_31 Start: 27340, Stop: 26939, Start Num: 12

Candidate Starts for Brusacoram_31:

(3, 27451), (Start: 6 @27421 has 2 MA's), (Start: 12 @27340 has 41 MA's), (15, 27313), (17, 27283), (18, 27265), (19, 27256), (21, 27241), (23, 27223), (24, 27196), (26, 27163), (27, 27133), (31, 26983),

Gene: Bunnies_31 Start: 27361, Stop: 26960, Start Num: 12

Candidate Starts for Bunnies_31:

(3, 27472), (Start: 6 @27442 has 2 MA's), (Start: 12 @27361 has 41 MA's), (15, 27334), (17, 27304), (18, 27286), (19, 27277), (21, 27262), (23, 27244), (24, 27217), (26, 27184), (27, 27154), (31, 27004),

Gene: CactusJack_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for CactusJack_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: Camster_31 Start: 27377, Stop: 26976, Start Num: 12

Candidate Starts for Camster_31:

(3, 27488), (Start: 6 @27458 has 2 MA's), (Start: 12 @27377 has 41 MA's), (15, 27350), (17, 27320), (18, 27302), (19, 27293), (21, 27278), (23, 27260), (24, 27233), (26, 27200), (27, 27170), (31, 27020),

Gene: Donovan_31 Start: 27369, Stop: 26968, Start Num: 12

Candidate Starts for Donovan_31:

(3, 27480), (Start: 6 @27450 has 2 MA's), (8, 27426), (Start: 12 @27369 has 41 MA's), (15, 27342), (17, 27312), (18, 27294), (21, 27270), (23, 27252), (24, 27225), (26, 27192), (27, 27162), (31, 27012),

Gene: Dynamo_31 Start: 27758, Stop: 27357, Start Num: 12

Candidate Starts for Dynamo_31:

(3, 27869), (Start: 6 @27839 has 2 MA's), (8, 27815), (Start: 12 @27758 has 41 MA's), (15, 27731), (17, 27701), (18, 27683), (21, 27659), (23, 27641), (24, 27614), (26, 27581), (27, 27551), (31, 27401),

Gene: FirstPlacePfu_31 Start: 27379, Stop: 26978, Start Num: 12

Candidate Starts for FirstPlacePfu_31:

(3, 27490), (Start: 6 @27460 has 2 MA's), (Start: 12 @27379 has 41 MA's), (15, 27352), (17, 27322), (18, 27304), (21, 27280), (23, 27262), (24, 27235), (26, 27202), (27, 27172), (31, 27022),

Gene: Fishburne_31 Start: 27347, Stop: 26946, Start Num: 12

Candidate Starts for Fishburne_31:

(3, 27458), (Start: 6 @27428 has 2 MA's), (8, 27404), (Start: 12 @27347 has 41 MA's), (15, 27320), (17, 27290), (18, 27272), (21, 27248), (23, 27230), (24, 27203), (26, 27170), (27, 27140), (31, 26990),

Gene: Glaske_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for Glaske_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: GreaseLightnin_31 Start: 27596, Stop: 27195, Start Num: 12

Candidate Starts for GreaseLightnin_31:

(3, 27707), (Start: 6 @27677 has 2 MA's), (Start: 12 @27596 has 41 MA's), (15, 27569), (17, 27539), (18, 27521), (19, 27512), (21, 27497), (23, 27479), (24, 27452), (26, 27419), (27, 27389), (31, 27239),

Gene: Gusanita_40 Start: 30510, Stop: 30103, Start Num: 11

Candidate Starts for Gusanita_40:

(Start: 11 @30510 has 1 MA's), (13, 30495), (25, 30354), (28, 30270), (30, 30201),

Gene: HUHilltop_31 Start: 27380, Stop: 26979, Start Num: 12

Candidate Starts for HUHilltop_31:

(3, 27491), (Start: 6 @27461 has 2 MA's), (8, 27437), (Start: 12 @27380 has 41 MA's), (15, 27353), (17, 27323), (18, 27305), (21, 27281), (23, 27263), (24, 27236), (26, 27203), (27, 27173), (31, 27023),

Gene: Jebeks_32 Start: 27332, Stop: 26931, Start Num: 12

Candidate Starts for Jebeks_32:

(3, 27443), (Start: 6 @27413 has 2 MA's), (Start: 12 @27332 has 41 MA's), (15, 27305), (17, 27275), (18, 27257), (21, 27233), (23, 27215), (24, 27188), (26, 27155), (27, 27125), (31, 26975),

Gene: Jung_30 Start: 27311, Stop: 26910, Start Num: 12

Candidate Starts for Jung_30:

(3, 27422), (Start: 6 @27392 has 2 MA's), (Start: 12 @27311 has 41 MA's), (15, 27284), (17, 27254), (18, 27236), (19, 27227), (21, 27212), (23, 27194), (24, 27167), (26, 27134), (27, 27104), (31, 26954),

Gene: Juniormint_31 Start: 27383, Stop: 26982, Start Num: 12

Candidate Starts for Juniormint_31:

(3, 27494), (Start: 6 @27464 has 2 MA's), (Start: 12 @27383 has 41 MA's), (15, 27356), (17, 27326), (18, 27308), (19, 27299), (21, 27284), (23, 27266), (24, 27239), (26, 27206), (27, 27176), (31, 27026),

Gene: Kari_31 Start: 27344, Stop: 26943, Start Num: 12

Candidate Starts for Kari_31:

(3, 27455), (Start: 6 @27425 has 2 MA's), (8, 27401), (Start: 12 @27344 has 41 MA's), (15, 27317), (17, 27287), (18, 27269), (21, 27245), (23, 27227), (24, 27200), (26, 27167), (27, 27137), (31, 26987),

Gene: KilKor_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for KilKor_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: Ksquared_31 Start: 27361, Stop: 26960, Start Num: 12

Candidate Starts for Ksquared_31:

(3, 27472), (Start: 6 @27442 has 2 MA's), (Start: 12 @27361 has 41 MA's), (15, 27334), (17, 27304), (18, 27286), (19, 27277), (21, 27262), (23, 27244), (24, 27217), (26, 27184), (27, 27154), (31, 27004),

Gene: Langerak_31 Start: 27363, Stop: 26962, Start Num: 12

Candidate Starts for Langerak_31:

(3, 27474), (Start: 6 @27444 has 2 MA's), (8, 27420), (Start: 12 @27363 has 41 MA's), (15, 27336), (17, 27306), (18, 27288), (21, 27264), (23, 27246), (24, 27219), (26, 27186), (27, 27156), (31, 27006),

Gene: Lenoxika_43 Start: 30210, Stop: 29782, Start Num: 11

Candidate Starts for Lenoxika_43:

(2, 30324), (5, 30300), (10, 30228), (Start: 11 @30210 has 1 MA's), (22, 30096), (28, 29961), (29, 29898), (30, 29892),

Gene: Majeke_31 Start: 27385, Stop: 26984, Start Num: 12

Candidate Starts for Majeke_31:

(3, 27496), (Start: 6 @27466 has 2 MA's), (8, 27442), (Start: 12 @27385 has 41 MA's), (15, 27358), (17, 27328), (18, 27310), (21, 27286), (23, 27268), (24, 27241), (26, 27208), (27, 27178), (31, 27028),

Gene: Malithi_31 Start: 27270, Stop: 26800, Start Num: 12

Candidate Starts for Malithi_31:

(3, 27381), (Start: 6 @27351 has 2 MA's), (Start: 12 @27270 has 41 MA's), (15, 27243), (17, 27213), (18, 27195), (19, 27186), (21, 27171), (23, 27153), (24, 27126), (26, 27093), (27, 27063), (31, 26913), (32, 26886), (33, 26808),

Gene: Mangethe_31 Start: 27385, Stop: 26984, Start Num: 12

Candidate Starts for Mangethe_31:

(3, 27496), (Start: 6 @27466 has 2 MA's), (8, 27442), (Start: 12 @27385 has 41 MA's), (15, 27358), (17, 27328), (18, 27310), (21, 27286), (23, 27268), (24, 27241), (26, 27208), (27, 27178), (31, 27028),

Gene: Megiddo_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for Megiddo_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: Nazo_35 Start: 29476, Stop: 29075, Start Num: 12

Candidate Starts for Nazo_35:

(1, 29623), (4, 29581), (7, 29542), (9, 29506), (Start: 12 @29476 has 41 MA's), (20, 29386), (21, 29377), (24, 29332), (26, 29299), (27, 29269), (31, 29119),

Gene: Necropolis_31 Start: 27344, Stop: 26943, Start Num: 12

Candidate Starts for Necropolis_31:

(3, 27455), (Start: 6 @27425 has 2 MA's), (8, 27401), (Start: 12 @27344 has 41 MA's), (15, 27317), (17, 27287), (18, 27269), (21, 27245), (23, 27227), (24, 27200), (26, 27167), (27, 27137), (31, 26987),

Gene: Phalm_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for Phalm_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: Phayonce_33 Start: 29388, Stop: 28987, Start Num: 12

Candidate Starts for Phayonce_33:

(Start: 12 @29388 has 41 MA's), (14, 29370), (19, 29304), (20, 29298), (21, 29289), (24, 29244), (26, 29211), (27, 29181),

Gene: Phegasus_31 Start: 27433, Stop: 26951, Start Num: 6

Candidate Starts for Phegasus_31:

(3, 27463), (Start: 6 @27433 has 2 MA's), (Start: 12 @27352 has 41 MA's), (15, 27325), (17, 27295), (18, 27277), (21, 27253), (23, 27235), (24, 27208), (26, 27175), (27, 27145), (31, 26995),

Gene: Phineas_31 Start: 27718, Stop: 27317, Start Num: 12

Candidate Starts for Phineas_31:

(3, 27829), (Start: 6 @27799 has 2 MA's), (8, 27775), (Start: 12 @27718 has 41 MA's), (15, 27691), (17, 27661), (18, 27643), (21, 27619), (23, 27601), (24, 27574), (26, 27541), (27, 27511), (31, 27361),

Gene: Polkaroo_31 Start: 27361, Stop: 26960, Start Num: 12

Candidate Starts for Polkaroo_31:

(3, 27472), (Start: 6 @27442 has 2 MA's), (Start: 12 @27361 has 41 MA's), (15, 27334), (17, 27304), (18, 27286), (19, 27277), (21, 27262), (23, 27244), (24, 27217), (26, 27184), (27, 27154), (31, 27004),

Gene: Purky_38 Start: 30118, Stop: 29705, Start Num: 12

Candidate Starts for Purky_38:

(Start: 12 @30118 has 41 MA's), (14, 30100), (16, 30073), (19, 30034), (20, 30028), (21, 30019), (24, 29974), (26, 29941), (27, 29911),

Gene: Pygmy_33 Start: 29186, Stop: 28785, Start Num: 12

Candidate Starts for Pygmy_33:

(Start: 12 @29186 has 41 MA's), (15, 29159), (17, 29129), (18, 29111), (21, 29087), (23, 29069), (24, 29042), (26, 29009), (27, 28979), (31, 28829),

Gene: Shipwreck_33 Start: 29161, Stop: 28760, Start Num: 12

Candidate Starts for Shipwreck_33:

(Start: 12 @29161 has 41 MA's), (15, 29134), (17, 29104), (18, 29086), (21, 29062), (23, 29044), (24, 29017), (26, 28984), (27, 28954), (31, 28804),

Gene: Sonah_31 Start: 27333, Stop: 26932, Start Num: 12

Candidate Starts for Sonah_31:

(3, 27444), (Start: 6 @27414 has 2 MA's), (Start: 12 @27333 has 41 MA's), (15, 27306), (17, 27276), (18, 27258), (19, 27249), (21, 27234), (23, 27216), (24, 27189), (26, 27156), (27, 27126), (31, 26976),

Gene: StevieRay_31 Start: 27312, Stop: 26911, Start Num: 12

Candidate Starts for StevieRay_31:

(3, 27423), (Start: 6 @27393 has 2 MA's), (Start: 12 @27312 has 41 MA's), (15, 27285), (17, 27255), (18, 27237), (19, 27228), (21, 27213), (23, 27195), (24, 27168), (26, 27135), (27, 27105), (31, 26955),

Gene: StressBall_31 Start: 27604, Stop: 27203, Start Num: 12

Candidate Starts for StressBall_31:

(3, 27715), (Start: 6 @27685 has 2 MA's), (Start: 12 @27604 has 41 MA's), (15, 27577), (17, 27547), (18, 27529), (19, 27520), (21, 27505), (23, 27487), (24, 27460), (26, 27427), (27, 27397), (31, 27247),

Gene: Techage_31 Start: 27370, Stop: 26969, Start Num: 12

Candidate Starts for Techage_31:

(3, 27481), (Start: 6 @27451 has 2 MA's), (8, 27427), (Start: 12 @27370 has 41 MA's), (15, 27343), (17, 27313), (18, 27295), (21, 27271), (23, 27253), (24, 27226), (26, 27193), (27, 27163), (31, 27013),

Gene: Thespis_31 Start: 27421, Stop: 26939, Start Num: 6

Candidate Starts for Thespis_31:

(3, 27451), (Start: 6 @27421 has 2 MA's), (Start: 12 @27340 has 41 MA's), (15, 27313), (17, 27283), (18, 27265), (19, 27256), (21, 27241), (23, 27223), (24, 27196), (26, 27163), (27, 27133), (31, 26983),

Gene: Venti_31 Start: 27347, Stop: 26946, Start Num: 12

Candidate Starts for Venti_31:

(3, 27458), (Start: 6 @27428 has 2 MA's), (8, 27404), (Start: 12 @27347 has 41 MA's), (15, 27320), (17, 27290), (18, 27272), (21, 27248), (23, 27230), (24, 27203), (26, 27170), (27, 27140), (31, 26990),

Gene: Vidya_31 Start: 27380, Stop: 26979, Start Num: 12

Candidate Starts for Vidya_31:

(3, 27491), (Start: 6 @27461 has 2 MA's), (8, 27437), (Start: 12 @27380 has 41 MA's), (15, 27353), (17, 27323), (18, 27305), (21, 27281), (23, 27263), (24, 27236), (26, 27203), (27, 27173), (31, 27023),

Gene: Willsammy_30 Start: 27087, Stop: 26686, Start Num: 12

Candidate Starts for Willsammy_30:

(3, 27198), (Start: 6 @27168 has 2 MA's), (Start: 12 @27087 has 41 MA's), (15, 27060), (17, 27030), (18, 27012), (19, 27003), (21, 26988), (23, 26970), (24, 26943), (26, 26910), (27, 26880), (31, 26730),

Gene: Zilizebeth_31 Start: 27379, Stop: 26978, Start Num: 12

Candidate Starts for Zilizebeth_31:

(3, 27490), (Start: 6 @27460 has 2 MA's), (8, 27436), (Start: 12 @27379 has 41 MA's), (15, 27352), (17, 27322), (18, 27304), (21, 27280), (23, 27262), (24, 27235), (26, 27202), (27, 27172), (31, 27022),