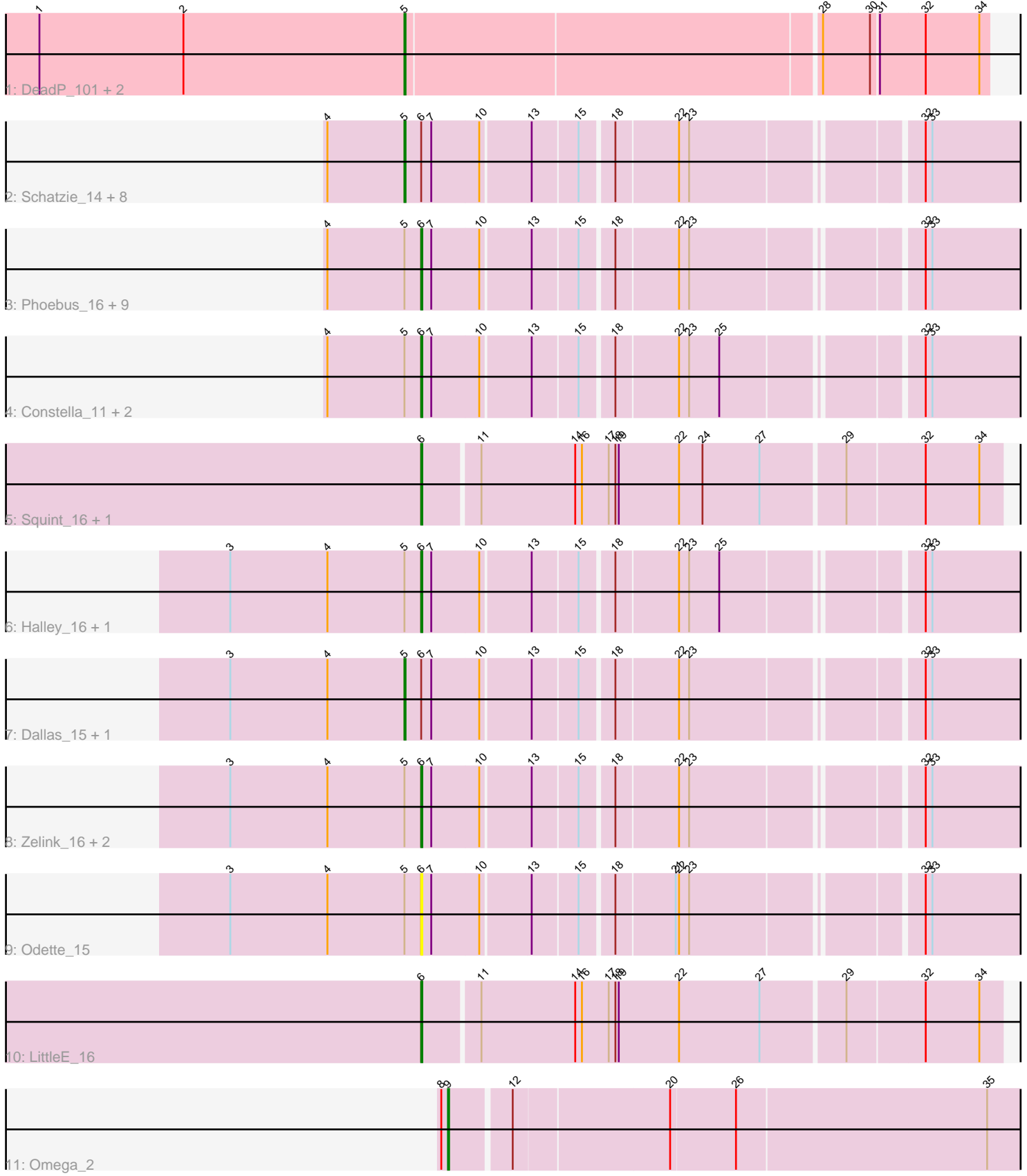


Pham 158031



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 158031 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158031 has 37 members, 2 are drafts.

Phages represented in each track:

- Track 1 : DeadP_101, Tweety_102, Dante_99
- Track 2 : Schatzie_14, NihilNomen_15, Duke13_12, HokkenD_11, EricMillard_16, Kalah2_16, Beem_16, Yeet_14, Wanda_16
- Track 3 : Phoebus_16, Ejimix_17, Pound_16, Bombitas_13, DmpstrDiver_15, Dove_14, Optimus_13, Hughesyang_15, BAKA_12, ThreeRngTarjay_15
- Track 4 : Constella_11, Thibault_12, Bobby_17
- Track 5 : Squint_16, Lucky2013_16
- Track 6 : Halley_16, Redno2_15
- Track 7 : Dallas_15, JuicyJay_17
- Track 8 : Zelink_16, Klein_16, Minerva_15
- Track 9 : Odette_15
- Track 10 : LittleE_16
- Track 11 : Omega_2

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

The start number called the most often in the published annotations is 6, it was called in 20 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA_12, Bobby_17, Bombitas_13, Constella_11, DmpstrDiver_15, Dove_14, Ejimix_17, Halley_16, Hughesyang_15, Klein_16, LittleE_16, Lucky2013_16, Minerva_15, Odette_15, Optimus_13, Phoebus_16, Pound_16, Redno2_15, Squint_16, Thibault_12, ThreeRngTarjay_15, Zelink_16,

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

- Beem_16, Dallas_15, Duke13_12, EricMillard_16, HokkenD_11, JuicyJay_17, Kalah2_16, NihilNomen_15, Schatzie_14, Wanda_16, Yeet_14,

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

- Dante_99, DeadP_101, Omega_2, Tweety_102,

Summary by start number:

Start 5:

- Found in 33 of 37 (89.2%) of genes in pham
- Manual Annotations of this start: 14 of 35
- Called 42.4% of time when present
- Phage (with cluster) where this start called: Beem_16 (J), Dallas_15 (J), Dante_99 (F1), DeadP_101 (F1), Duke13_12 (J), EricMillard_16 (J), HokkenD_11 (J), JuicyJay_17 (J), Kalah2_16 (J), NihilNomen_15 (J), Schatzie_14 (J), Tweety_102 (F1), Wanda_16 (J), Yeet_14 (J),

Start 6:

- Found in 33 of 37 (89.2%) of genes in pham
- Manual Annotations of this start: 20 of 35
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BAKA_12 (J), Bobby_17 (J), Bombitas_13 (J), Constella_11 (J), DmpstrDiver_15 (J), Dove_14 (J), Ejimix_17 (J), Halley_16 (J), Hughesyang_15 (J), Klein_16 (J), LittleE_16 (J), Lucky2013_16 (J), Minerva_15 (J), Odette_15 (J), Optimus_13 (J), Phoebus_16 (J), Pound_16 (J), Redno2_15 (J), Squint_16 (J), Thibault_12 (J), ThreeRngTarjay_15 (J), Zelink_16 (J),

Start 9:

- Found in 1 of 37 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omega_2 (J),

Summary by clusters:

There are 2 clusters represented in this pham: F1, J,

Info for manual annotations of cluster F1:

- Start number 5 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster J:

- Start number 5 was manually annotated 11 times for cluster J.
- Start number 6 was manually annotated 20 times for cluster J.
- Start number 9 was manually annotated 1 time for cluster J.

Gene Information:

Gene: BAKA_12 Start: 10159, Stop: 10653, Start Num: 6

Candidate Starts for BAKA_12:

(4, 10075), (Start: 5 @10144 has 14 MA's), (Start: 6 @10159 has 20 MA's), (7, 10168), (10, 10210), (13, 10252), (15, 10291), (18, 10318), (22, 10372), (23, 10381), (32, 10567), (33, 10573),

Gene: Beem_16 Start: 10502, Stop: 11011, Start Num: 5

Candidate Starts for Beem_16:

(4, 10433), (Start: 5 @10502 has 14 MA's), (Start: 6 @10517 has 20 MA's), (7, 10526), (10, 10568), (13, 10610), (15, 10649), (18, 10676), (22, 10730), (23, 10739), (32, 10925), (33, 10931),

Gene: Bobby_17 Start: 10470, Stop: 10964, Start Num: 6

Candidate Starts for Bobby_17:

(4, 10386), (Start: 5 @10455 has 14 MA's), (Start: 6 @10470 has 20 MA's), (7, 10479), (10, 10521), (13, 10563), (15, 10602), (18, 10629), (22, 10683), (23, 10692), (25, 10719), (32, 10878), (33, 10884),

Gene: Bombitas_13 Start: 9826, Stop: 10320, Start Num: 6

Candidate Starts for Bombitas_13:

(4, 9742), (Start: 5 @9811 has 14 MA's), (Start: 6 @9826 has 20 MA's), (7, 9835), (10, 9877), (13, 9919), (15, 9958), (18, 9985), (22, 10039), (23, 10048), (32, 10234), (33, 10240),

Gene: Constella_11 Start: 9340, Stop: 9834, Start Num: 6

Candidate Starts for Constella_11:

(4, 9256), (Start: 5 @9325 has 14 MA's), (Start: 6 @9340 has 20 MA's), (7, 9349), (10, 9391), (13, 9433), (15, 9472), (18, 9499), (22, 9553), (23, 9562), (25, 9589), (32, 9748), (33, 9754),

Gene: Dallas_15 Start: 10042, Stop: 10551, Start Num: 5

Candidate Starts for Dallas_15:

(3, 9886), (4, 9973), (Start: 5 @10042 has 14 MA's), (Start: 6 @10057 has 20 MA's), (7, 10066), (10, 10108), (13, 10150), (15, 10189), (18, 10216), (22, 10270), (23, 10279), (32, 10465), (33, 10471),

Gene: Dante_99 Start: 55775, Stop: 56278, Start Num: 5

Candidate Starts for Dante_99:

(1, 55448), (2, 55577), (Start: 5 @55775 has 14 MA's), (28, 56135), (30, 56177), (31, 56183), (32, 56222), (34, 56270),

Gene: DeadP_101 Start: 53003, Stop: 53506, Start Num: 5

Candidate Starts for DeadP_101:

(1, 52676), (2, 52805), (Start: 5 @53003 has 14 MA's), (28, 53363), (30, 53405), (31, 53411), (32, 53450), (34, 53498),

Gene: DmpstrDiver_15 Start: 10697, Stop: 11191, Start Num: 6

Candidate Starts for DmpstrDiver_15:

(4, 10613), (Start: 5 @10682 has 14 MA's), (Start: 6 @10697 has 20 MA's), (7, 10706), (10, 10748), (13, 10790), (15, 10829), (18, 10856), (22, 10910), (23, 10919), (32, 11105), (33, 11111),

Gene: Dove_14 Start: 9825, Stop: 10319, Start Num: 6

Candidate Starts for Dove_14:

(4, 9741), (Start: 5 @9810 has 14 MA's), (Start: 6 @9825 has 20 MA's), (7, 9834), (10, 9876), (13, 9918), (15, 9957), (18, 9984), (22, 10038), (23, 10047), (32, 10233), (33, 10239),

Gene: Duke13_12 Start: 10072, Stop: 10581, Start Num: 5

Candidate Starts for Duke13_12:

(4, 10003), (Start: 5 @10072 has 14 MA's), (Start: 6 @10087 has 20 MA's), (7, 10096), (10, 10138), (13, 10180), (15, 10219), (18, 10246), (22, 10300), (23, 10309), (32, 10495), (33, 10501),

Gene: Ejimix_17 Start: 11267, Stop: 11761, Start Num: 6

Candidate Starts for Ejimix_17:

(4, 11183), (Start: 5 @11252 has 14 MA's), (Start: 6 @11267 has 20 MA's), (7, 11276), (10, 11318), (13, 11360), (15, 11399), (18, 11426), (22, 11480), (23, 11489), (32, 11675), (33, 11681),

Gene: EricMillard_16 Start: 10792, Stop: 11301, Start Num: 5

Candidate Starts for EricMillard_16:

(4, 10723), (Start: 5 @10792 has 14 MA's), (Start: 6 @10807 has 20 MA's), (7, 10816), (10, 10858), (13, 10900), (15, 10939), (18, 10966), (22, 11020), (23, 11029), (32, 11215), (33, 11221),

Gene: Halley_16 Start: 10517, Stop: 11011, Start Num: 6

Candidate Starts for Halley_16:

(3, 10346), (4, 10433), (Start: 5 @10502 has 14 MA's), (Start: 6 @10517 has 20 MA's), (7, 10526), (10, 10568), (13, 10610), (15, 10649), (18, 10676), (22, 10730), (23, 10739), (25, 10766), (32, 10925), (33, 10931),

Gene: HokkenD_11 Start: 10075, Stop: 10584, Start Num: 5

Candidate Starts for HokkenD_11:

(4, 10006), (Start: 5 @10075 has 14 MA's), (Start: 6 @10090 has 20 MA's), (7, 10099), (10, 10141), (13, 10183), (15, 10222), (18, 10249), (22, 10303), (23, 10312), (32, 10498), (33, 10504),

Gene: Hughesyang_15 Start: 10697, Stop: 11191, Start Num: 6

Candidate Starts for Hughesyang_15:

(4, 10613), (Start: 5 @10682 has 14 MA's), (Start: 6 @10697 has 20 MA's), (7, 10706), (10, 10748), (13, 10790), (15, 10829), (18, 10856), (22, 10910), (23, 10919), (32, 11105), (33, 11111),

Gene: JuicyJay_17 Start: 11333, Stop: 11842, Start Num: 5

Candidate Starts for JuicyJay_17:

(3, 11177), (4, 11264), (Start: 5 @11333 has 14 MA's), (Start: 6 @11348 has 20 MA's), (7, 11357), (10, 11399), (13, 11441), (15, 11480), (18, 11507), (22, 11561), (23, 11570), (32, 11756), (33, 11762),

Gene: Kalah2_16 Start: 11101, Stop: 11610, Start Num: 5

Candidate Starts for Kalah2_16:

(4, 11032), (Start: 5 @11101 has 14 MA's), (Start: 6 @11116 has 20 MA's), (7, 11125), (10, 11167), (13, 11209), (15, 11248), (18, 11275), (22, 11329), (23, 11338), (32, 11524), (33, 11530),

Gene: Klein_16 Start: 10094, Stop: 10588, Start Num: 6

Candidate Starts for Klein_16:

(3, 9923), (4, 10010), (Start: 5 @10079 has 14 MA's), (Start: 6 @10094 has 20 MA's), (7, 10103), (10, 10145), (13, 10187), (15, 10226), (18, 10253), (22, 10307), (23, 10316), (32, 10502), (33, 10508),

Gene: LittleE_16 Start: 11249, Stop: 11752, Start Num: 6

Candidate Starts for LittleE_16:

(Start: 6 @11249 has 20 MA's), (11, 11297), (14, 11381), (16, 11387), (17, 11411), (18, 11417), (19, 11420), (22, 11474), (27, 11546), (29, 11618), (32, 11684), (34, 11732),

Gene: Lucky2013_16 Start: 9992, Stop: 10495, Start Num: 6

Candidate Starts for Lucky2013_16:

(Start: 6 @9992 has 20 MA's), (11, 10040), (14, 10124), (16, 10130), (17, 10154), (18, 10160), (19, 10163), (22, 10217), (24, 10238), (27, 10289), (29, 10361), (32, 10427), (34, 10475),

Gene: Minerva_15 Start: 10577, Stop: 11071, Start Num: 6

Candidate Starts for Minerva_15:

(3, 10406), (4, 10493), (Start: 5 @10562 has 14 MA's), (Start: 6 @10577 has 20 MA's), (7, 10586), (10, 10628), (13, 10670), (15, 10709), (18, 10736), (22, 10790), (23, 10799), (32, 10985), (33, 10991),

Gene: NihilNomen_15 Start: 10561, Stop: 11070, Start Num: 5

Candidate Starts for NihilNomen_15:

(4, 10492), (Start: 5 @10561 has 14 MA's), (Start: 6 @10576 has 20 MA's), (7, 10585), (10, 10627), (13, 10669), (15, 10708), (18, 10735), (22, 10789), (23, 10798), (32, 10984), (33, 10990),

Gene: Odette_15 Start: 10059, Stop: 10553, Start Num: 6

Candidate Starts for Odette_15:

(3, 9888), (4, 9975), (Start: 5 @10044 has 14 MA's), (Start: 6 @10059 has 20 MA's), (7, 10068), (10, 10110), (13, 10152), (15, 10191), (18, 10218), (21, 10269), (22, 10272), (23, 10281), (32, 10467), (33, 10473),

Gene: Omega_2 Start: 991, Stop: 1488, Start Num: 9

Candidate Starts for Omega_2:

(8, 985), (Start: 9 @991 has 1 MA's), (12, 1042), (20, 1177), (26, 1234), (35, 1456),

Gene: Optimus_13 Start: 10160, Stop: 10654, Start Num: 6

Candidate Starts for Optimus_13:

(4, 10076), (Start: 5 @10145 has 14 MA's), (Start: 6 @10160 has 20 MA's), (7, 10169), (10, 10211), (13, 10253), (15, 10292), (18, 10319), (22, 10373), (23, 10382), (32, 10568), (33, 10574),

Gene: Phoebus_16 Start: 10807, Stop: 11301, Start Num: 6

Candidate Starts for Phoebus_16:

(4, 10723), (Start: 5 @10792 has 14 MA's), (Start: 6 @10807 has 20 MA's), (7, 10816), (10, 10858), (13, 10900), (15, 10939), (18, 10966), (22, 11020), (23, 11029), (32, 11215), (33, 11221),

Gene: Pound_16 Start: 10895, Stop: 11389, Start Num: 6

Candidate Starts for Pound_16:

(4, 10811), (Start: 5 @10880 has 14 MA's), (Start: 6 @10895 has 20 MA's), (7, 10904), (10, 10946), (13, 10988), (15, 11027), (18, 11054), (22, 11108), (23, 11117), (32, 11303), (33, 11309),

Gene: Redno2_15 Start: 10287, Stop: 10781, Start Num: 6

Candidate Starts for Redno2_15:

(3, 10116), (4, 10203), (Start: 5 @10272 has 14 MA's), (Start: 6 @10287 has 20 MA's), (7, 10296), (10, 10338), (13, 10380), (15, 10419), (18, 10446), (22, 10500), (23, 10509), (25, 10536), (32, 10695), (33, 10701),

Gene: Schatzie_14 Start: 9811, Stop: 10320, Start Num: 5

Candidate Starts for Schatzie_14:

(4, 9742), (Start: 5 @9811 has 14 MA's), (Start: 6 @9826 has 20 MA's), (7, 9835), (10, 9877), (13, 9919), (15, 9958), (18, 9985), (22, 10039), (23, 10048), (32, 10234), (33, 10240),

Gene: Squint_16 Start: 9809, Stop: 10312, Start Num: 6

Candidate Starts for Squint_16:

(Start: 6 @9809 has 20 MA's), (11, 9857), (14, 9941), (16, 9947), (17, 9971), (18, 9977), (19, 9980), (22, 10034), (24, 10055), (27, 10106), (29, 10178), (32, 10244), (34, 10292),

Gene: Thibault_12 Start: 10087, Stop: 10581, Start Num: 6

Candidate Starts for Thibault_12:

(4, 10003), (Start: 5 @10072 has 14 MA's), (Start: 6 @10087 has 20 MA's), (7, 10096), (10, 10138), (13, 10180), (15, 10219), (18, 10246), (22, 10300), (23, 10309), (25, 10336), (32, 10495), (33, 10501),

Gene: ThreeRngTarjay_15 Start: 10651, Stop: 11145, Start Num: 6

Candidate Starts for ThreeRngTarjay_15:

(4, 10567), (Start: 5 @10636 has 14 MA's), (Start: 6 @10651 has 20 MA's), (7, 10660), (10, 10702), (13, 10744), (15, 10783), (18, 10810), (22, 10864), (23, 10873), (32, 11059), (33, 11065),

Gene: Tweety_102 Start: 55234, Stop: 55737, Start Num: 5

Candidate Starts for Tweety_102:

(1, 54907), (2, 55036), (Start: 5 @55234 has 14 MA's), (28, 55594), (30, 55636), (31, 55642), (32, 55681), (34, 55729),

Gene: Wanda_16 Start: 10079, Stop: 10588, Start Num: 5

Candidate Starts for Wanda_16:

(4, 10010), (Start: 5 @10079 has 14 MA's), (Start: 6 @10094 has 20 MA's), (7, 10103), (10, 10145), (13, 10187), (15, 10226), (18, 10253), (22, 10307), (23, 10316), (32, 10502), (33, 10508),

Gene: Yeet_14 Start: 9811, Stop: 10320, Start Num: 5

Candidate Starts for Yeet_14:

(4, 9742), (Start: 5 @9811 has 14 MA's), (Start: 6 @9826 has 20 MA's), (7, 9835), (10, 9877), (13, 9919), (15, 9958), (18, 9985), (22, 10039), (23, 10048), (32, 10234), (33, 10240),

Gene: Zelink_16 Start: 10679, Stop: 11173, Start Num: 6

Candidate Starts for Zelink_16:

(3, 10508), (4, 10595), (Start: 5 @10664 has 14 MA's), (Start: 6 @10679 has 20 MA's), (7, 10688), (10, 10730), (13, 10772), (15, 10811), (18, 10838), (22, 10892), (23, 10901), (32, 11087), (33, 11093),