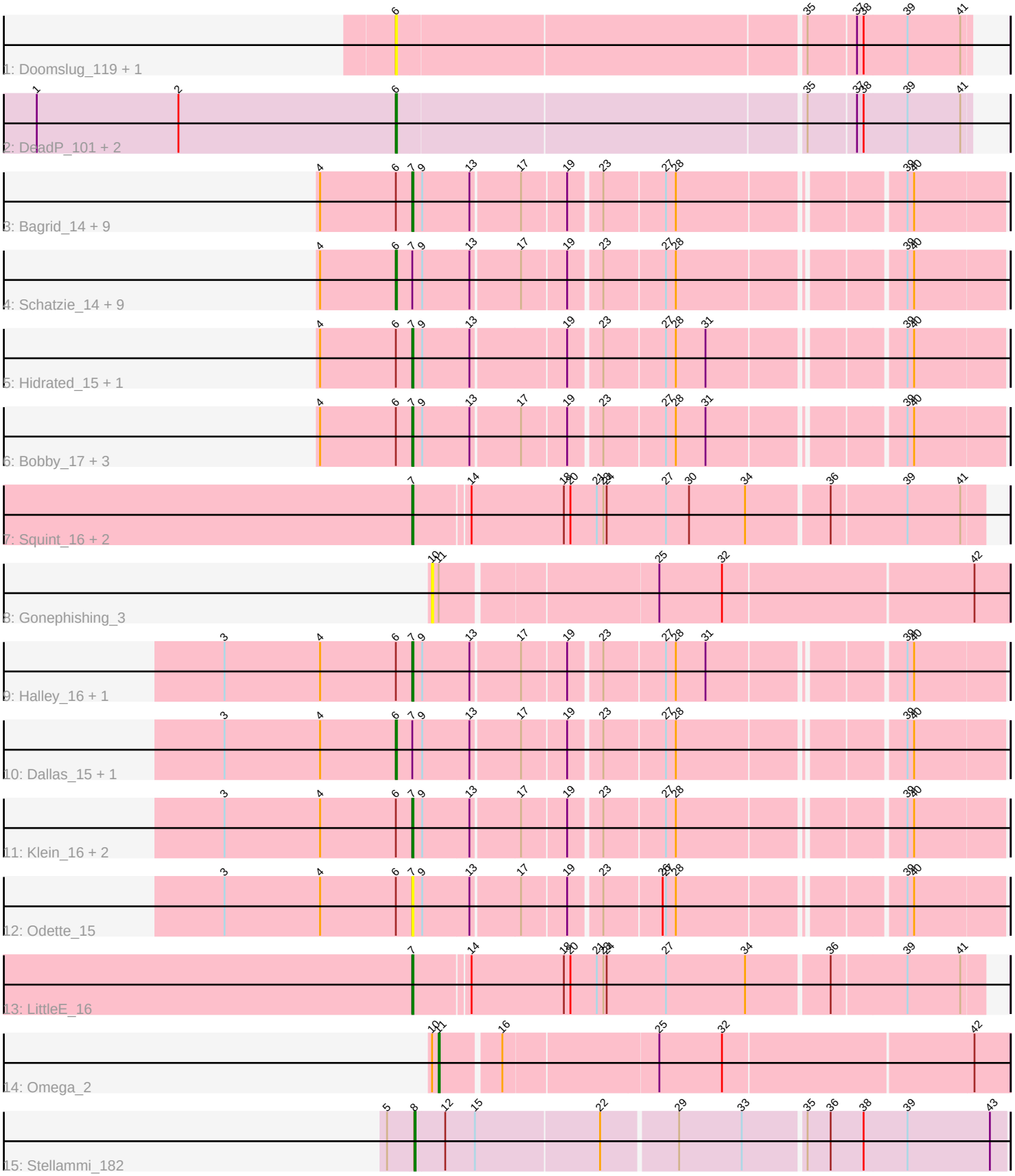
# Pham 347755


1: Doomslug_119 + 1
2: DeadP_101 + 2
3: Bagrid_14 + 9
4: Schatzie_14 + 9
5: Hidrated_15 + 1
6: Bobby_17 + 3
7: Squint_16 + 2
8: Gonephishing_3
9: Halley_16 + 1
10: Dallas_15 + 1
11: Klein_16 + 2
12: Odette_15
13: LittleE_16
14: Omega_2
15: Stellammi_182

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 347755 Report

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

Pham number 347755 has 46 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Doomslug_119, Jant_108
• Track 2 : DeadP_101, Tweety_102, Dante_99
• Track 3 : Bagrid_14, Ejimix_17, Pound_16, Bombitas_13, DmpstrDiver_15, Optimus_13, Hughesyang_15, Phoebus_16, BAKA_12, ThreeRngTarjay_15
• Track 4 : Schatzie_14, NihilNomen_15, Dove_13, Duke13_12, EricMillard_16, Kalah2_16, Beem_16, HokkenD_11, Yeet_14, Wanda_16
• Track 5 : Hidrated_15, Marleymoo_17
• Track 6 : Bobby_17, Constella_11, Thibault_12, Xiaokay_13
• Track 7 : Squint_16, Lucky2013_16, Nibley_12
• Track 8 : Gonephishing_3
• Track 9 : Halley_16, Redno2_15
• Track 10 : Dallas_15, JuicyJay_17
• Track 11 : Klein_16, Minerva_15, Zelink_16
• Track 12 : Odette_15
• Track 13 : LittleE_16
• Track 14 : Omega_2
• Track 15 : Stellammi_182

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

The start number called the most often in the published annotations is 7, it was called in 21 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BAKA_12, Bagrid_14, Bobby_17, Bombitas_13, Constella_11, DmpstrDiver_15, Ejimix_17, Halley_16, Hidrated_15, Hughesyang_15, Klein_16, LittleE_16, Lucky2013_16, Marleymoo_17, Minerva_15, Nibley_12, Odette_15, Optimus_13, Phoebus_16, Pound_16, Redno2_15, Squint_16, Thibault_12, ThreeRngTarjay_15, Xiaokay_13, Zelink_16,

Genes that have the "Most Annotated" start but do not call it:
• Beem_16, Dallas_15, Dove_13, 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, Doomslug_119, Gonephishing_3, Jant_108, Omega_2, Stellammi_182, Tweety_102,

**Summary by start number:**

Start 6:
• Found in 39 of 46 ( 84.8% ) of genes in pham
• Manual Annotations of this start: 15 of 38
• Called 43.6% of time when present
• Phage (with cluster) where this start called: Beem_16 (J), Dallas_15 (J), Dante_99 (F1), DeadP_101 (F1), Doomslug_119 (F), Dove_13 (J), Duke13_12 (J), EricMillard_16 (J), HokkenD_11 (J), Jant_108 (F1), JuicyJay_17 (J), Kalah2_16 (J), NihilNomen_15 (J), Schatzie_14 (J), Tweety_102 (F1), Wanda_16 (J), Yeet_14 (J),

Start 7:
• Found in 38 of 46 ( 82.6% ) of genes in pham
• Manual Annotations of this start: 21 of 38
• Called 68.4% of time when present
• Phage (with cluster) where this start called: BAKA_12 (J), Bagrid_14 (J), Bobby_17 (J), Bombitas_13 (J), Constella_11 (J), DmpstrDiver_15 (J), Ejimix_17 (J), Halley_16 (J), Hidrated_15 (J), Hughesyang_15 (J), Klein_16 (J), LittleE_16 (J), Lucky2013_16 (J), Marleymoo_17 (J), Minerva_15 (J), Nibley_12 (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), Xiaokay_13 (J), Zelink_16 (J),

Start 8:
• Found in 1 of 46 ( 2.2% ) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Stellammi_182 (UNK),

Start 10:
• Found in 2 of 46 ( 4.3% ) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Gonephishing_3 (J),

Start 11:
• Found in 2 of 46 ( 4.3% ) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Omega_2 (J),

**Summary by clusters:**

There are 4 clusters represented in this pham: F1, UNK, J, F,

Info for manual annotations of cluster F1:
•Start number 6 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster J:

•Start number 6 was manually annotated 12 times for cluster J.
•Start number 7 was manually annotated 21 times for cluster J.
•Start number 11 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster UNK:
•Start number 8 was manually annotated 1 time for cluster UNK.

### *Gene Information:*

Gene: BAKA_12 Start: 10159, Stop: 10653, Start Num: 7
Candidate Starts for BAKA_12:
(4, 10075), (Start: 6 @10144 has 15 MA's), (Start: 7 @10159 has 21 MA's), (9, 10168), (13, 10210), (17, 10252), (19, 10291), (23, 10318), (27, 10372), (28, 10381), (39, 10567), (40, 10573),

Gene: Bagrid_14 Start: 9951, Stop: 10445, Start Num: 7
Candidate Starts for Bagrid_14:
(4, 9867), (Start: 6 @9936 has 15 MA's), (Start: 7 @9951 has 21 MA's), (9, 9960), (13, 10002), (17, 10044), (19, 10083), (23, 10110), (27, 10164), (28, 10173), (39, 10359), (40, 10365),

Gene: Beem_16 Start: 10502, Stop: 11011, Start Num: 6
Candidate Starts for Beem_16:
(4, 10433), (Start: 6 @10502 has 15 MA's), (Start: 7 @10517 has 21 MA's), (9, 10526), (13, 10568), (17, 10610), (19, 10649), (23, 10676), (27, 10730), (28, 10739), (39, 10925), (40, 10931),

Gene: Bobby_17 Start: 10470, Stop: 10964, Start Num: 7
Candidate Starts for Bobby_17:
(4, 10386), (Start: 6 @10455 has 15 MA's), (Start: 7 @10470 has 21 MA's), (9, 10479), (13, 10521), (17, 10563), (19, 10602), (23, 10629), (27, 10683), (28, 10692), (31, 10719), (39, 10878), (40, 10884),

Gene: Bombitas_13 Start: 9826, Stop: 10320, Start Num: 7
Candidate Starts for Bombitas_13:
(4, 9742), (Start: 6 @9811 has 15 MA's), (Start: 7 @9826 has 21 MA's), (9, 9835), (13, 9877), (17, 9919), (19, 9958), (23, 9985), (27, 10039), (28, 10048), (39, 10234), (40, 10240),

Gene: Constella_11 Start: 9340, Stop: 9834, Start Num: 7
Candidate Starts for Constella_11:
(4, 9256), (Start: 6 @9325 has 15 MA's), (Start: 7 @9340 has 21 MA's), (9, 9349), (13, 9391), (17, 9433), (19, 9472), (23, 9499), (27, 9553), (28, 9562), (31, 9589), (39, 9748), (40, 9754),

Gene: Dallas_15 Start: 10042, Stop: 10551, Start Num: 6
Candidate Starts for Dallas_15:
(3, 9886), (4, 9973), (Start: 6 @10042 has 15 MA's), (Start: 7 @10057 has 21 MA's), (9, 10066), (13, 10108), (17, 10150), (19, 10189), (23, 10216), (27, 10270), (28, 10279), (39, 10465), (40, 10471),

Gene: Dante_99 Start: 55775, Stop: 56278, Start Num: 6
Candidate Starts for Dante_99:
(1, 55448), (2, 55577), (Start: 6 @55775 has 15 MA's), (35, 56135), (37, 56177), (38, 56183), (39, 56222), (41, 56270),

Gene: DeadP_101 Start: 53003, Stop: 53506, Start Num: 6
Candidate Starts for DeadP_101:

(1, 52676), (2, 52805), (Start: 6 @53003 has 15 MA's), (35, 53363), (37, 53405), (38, 53411), (39, 53450), (41, 53498),

Gene: DmpstrDiver_15 Start: 10697, Stop: 11191, Start Num: 7
Candidate Starts for DmpstrDiver_15:
(4, 10613), (Start: 6 @10682 has 15 MA's), (Start: 7 @10697 has 21 MA's), (9, 10706), (13, 10748), (17, 10790), (19, 10829), (23, 10856), (27, 10910), (28, 10919), (39, 11105), (40, 11111),

Gene: Doomslug_119 Start: 57499, Stop: 58002, Start Num: 6
Candidate Starts for Doomslug_119:
(Start: 6 @57499 has 15 MA's), (35, 57859), (37, 57901), (38, 57907), (39, 57946), (41, 57994),

Gene: Dove_13 Start: 9810, Stop: 10319, Start Num: 6
Candidate Starts for Dove_13:
(4, 9741), (Start: 6 @9810 has 15 MA's), (Start: 7 @9825 has 21 MA's), (9, 9834), (13, 9876), (17, 9918), (19, 9957), (23, 9984), (27, 10038), (28, 10047), (39, 10233), (40, 10239),

Gene: Duke13_12 Start: 10072, Stop: 10581, Start Num: 6
Candidate Starts for Duke13_12:
(4, 10003), (Start: 6 @10072 has 15 MA's), (Start: 7 @10087 has 21 MA's), (9, 10096), (13, 10138), (17, 10180), (19, 10219), (23, 10246), (27, 10300), (28, 10309), (39, 10495), (40, 10501),

Gene: Ejimix_17 Start: 11267, Stop: 11761, Start Num: 7
Candidate Starts for Ejimix_17:
(4, 11183), (Start: 6 @11252 has 15 MA's), (Start: 7 @11267 has 21 MA's), (9, 11276), (13, 11318), (17, 11360), (19, 11399), (23, 11426), (27, 11480), (28, 11489), (39, 11675), (40, 11681),

Gene: EricMillard_16 Start: 10792, Stop: 11301, Start Num: 6
Candidate Starts for EricMillard_16:
(4, 10723), (Start: 6 @10792 has 15 MA's), (Start: 7 @10807 has 21 MA's), (9, 10816), (13, 10858), (17, 10900), (19, 10939), (23, 10966), (27, 11020), (28, 11029), (39, 11215), (40, 11221),

Gene: Gonephishing_3 Start: 980, Stop: 1483, Start Num: 10
Candidate Starts for Gonephishing_3:
(10, 980), (Start: 11 @986 has 1 MA's), (25, 1172), (32, 1229), (42, 1451),

Gene: Halley_16 Start: 10517, Stop: 11011, Start Num: 7
Candidate Starts for Halley_16:
(3, 10346), (4, 10433), (Start: 6 @10502 has 15 MA's), (Start: 7 @10517 has 21 MA's), (9, 10526), (13, 10568), (17, 10610), (19, 10649), (23, 10676), (27, 10730), (28, 10739), (31, 10766), (39, 10925), (40, 10931),

Gene: Hidrated_15 Start: 10630, Stop: 11124, Start Num: 7
Candidate Starts for Hidrated_15:
(4, 10546), (Start: 6 @10615 has 15 MA's), (Start: 7 @10630 has 21 MA's), (9, 10639), (13, 10681), (19, 10762), (23, 10789), (27, 10843), (28, 10852), (31, 10879), (39, 11038), (40, 11044),

Gene: HokkenD_11 Start: 10075, Stop: 10584, Start Num: 6
Candidate Starts for HokkenD_11:
(4, 10006), (Start: 6 @10075 has 15 MA's), (Start: 7 @10090 has 21 MA's), (9, 10099), (13, 10141), (17, 10183), (19, 10222), (23, 10249), (27, 10303), (28, 10312), (39, 10498), (40, 10504),

Gene: Hughesyang_15 Start: 10697, Stop: 11191, Start Num: 7

Candidate Starts for Hughesyang_15:
(4, 10613), (Start: 6 @10682 has 15 MA's), (Start: 7 @10697 has 21 MA's), (9, 10706), (13, 10748), (17, 10790), (19, 10829), (23, 10856), (27, 10910), (28, 10919), (39, 11105), (40, 11111),

Gene: Jant_108 Start: 53958, Stop: 54461, Start Num: 6
Candidate Starts for Jant_108:
(Start: 6 @53958 has 15 MA's), (35, 54318), (37, 54360), (38, 54366), (39, 54405), (41, 54453),

Gene: JuicyJay_17 Start: 11333, Stop: 11842, Start Num: 6
Candidate Starts for JuicyJay_17:
(3, 11177), (4, 11264), (Start: 6 @11333 has 15 MA's), (Start: 7 @11348 has 21 MA's), (9, 11357), (13, 11399), (17, 11441), (19, 11480), (23, 11507), (27, 11561), (28, 11570), (39, 11756), (40, 11762),

Gene: Kalah2_16 Start: 11101, Stop: 11610, Start Num: 6
Candidate Starts for Kalah2_16:
(4, 11032), (Start: 6 @11101 has 15 MA's), (Start: 7 @11116 has 21 MA's), (9, 11125), (13, 11167), (17, 11209), (19, 11248), (23, 11275), (27, 11329), (28, 11338), (39, 11524), (40, 11530),

Gene: Klein_16 Start: 10094, Stop: 10588, Start Num: 7
Candidate Starts for Klein_16:
(3, 9923), (4, 10010), (Start: 6 @10079 has 15 MA's), (Start: 7 @10094 has 21 MA's), (9, 10103), (13, 10145), (17, 10187), (19, 10226), (23, 10253), (27, 10307), (28, 10316), (39, 10502), (40, 10508),

Gene: LittleE_16 Start: 11249, Stop: 11752, Start Num: 7
Candidate Starts for LittleE_16:
(Start: 7 @11249 has 21 MA's), (14, 11297), (18, 11381), (20, 11387), (21, 11411), (23, 11417), (24, 11420), (27, 11474), (34, 11546), (36, 11618), (39, 11684), (41, 11732),

Gene: Lucky2013_16 Start: 9992, Stop: 10495, Start Num: 7
Candidate Starts for Lucky2013_16:
(Start: 7 @9992 has 21 MA's), (14, 10040), (18, 10124), (20, 10130), (21, 10154), (23, 10160), (24, 10163), (27, 10217), (30, 10238), (34, 10289), (36, 10361), (39, 10427), (41, 10475),

Gene: Marleymoo_17 Start: 11175, Stop: 11669, Start Num: 7
Candidate Starts for Marleymoo_17:
(4, 11091), (Start: 6 @11160 has 15 MA's), (Start: 7 @11175 has 21 MA's), (9, 11184), (13, 11226), (19, 11307), (23, 11334), (27, 11388), (28, 11397), (31, 11424), (39, 11583), (40, 11589),

Gene: Minerva_15 Start: 10577, Stop: 11071, Start Num: 7
Candidate Starts for Minerva_15:
(3, 10406), (4, 10493), (Start: 6 @10562 has 15 MA's), (Start: 7 @10577 has 21 MA's), (9, 10586), (13, 10628), (17, 10670), (19, 10709), (23, 10736), (27, 10790), (28, 10799), (39, 10985), (40, 10991),

Gene: Nibley_12 Start: 8610, Stop: 9113, Start Num: 7
Candidate Starts for Nibley_12:
(Start: 7 @8610 has 21 MA's), (14, 8658), (18, 8742), (20, 8748), (21, 8772), (23, 8778), (24, 8781), (27, 8835), (30, 8856), (34, 8907), (36, 8979), (39, 9045), (41, 9093),

Gene: NihilNomen_15 Start: 10561, Stop: 11070, Start Num: 6
Candidate Starts for NihilNomen_15:
(4, 10492), (Start: 6 @10561 has 15 MA's), (Start: 7 @10576 has 21 MA's), (9, 10585), (13, 10627), (17, 10669), (19, 10708), (23, 10735), (27, 10789), (28, 10798), (39, 10984), (40, 10990),

Gene: Odette_15 Start: 10059, Stop: 10553, Start Num: 7
Candidate Starts for Odette_15:
(3, 9888), (4, 9975), (Start: 6 @10044 has 15 MA's), (Start: 7 @10059 has 21 MA's), (9, 10068), (13, 10110), (17, 10152), (19, 10191), (23, 10218), (26, 10269), (27, 10272), (28, 10281), (39, 10467), (40, 10473),

Gene: Omega_2 Start: 991, Stop: 1488, Start Num: 11
Candidate Starts for Omega_2:
(10, 985), (Start: 11 @991 has 1 MA's), (16, 1042), (25, 1177), (32, 1234), (42, 1456),

Gene: Optimus_13 Start: 10160, Stop: 10654, Start Num: 7
Candidate Starts for Optimus_13:
(4, 10076), (Start: 6 @10145 has 15 MA's), (Start: 7 @10160 has 21 MA's), (9, 10169), (13, 10211), (17, 10253), (19, 10292), (23, 10319), (27, 10373), (28, 10382), (39, 10568), (40, 10574),

Gene: Phoebus_16 Start: 10807, Stop: 11301, Start Num: 7
Candidate Starts for Phoebus_16:
(4, 10723), (Start: 6 @10792 has 15 MA's), (Start: 7 @10807 has 21 MA's), (9, 10816), (13, 10858), (17, 10900), (19, 10939), (23, 10966), (27, 11020), (28, 11029), (39, 11215), (40, 11221),

Gene: Pound_16 Start: 10895, Stop: 11389, Start Num: 7
Candidate Starts for Pound_16:
(4, 10811), (Start: 6 @10880 has 15 MA's), (Start: 7 @10895 has 21 MA's), (9, 10904), (13, 10946), (17, 10988), (19, 11027), (23, 11054), (27, 11108), (28, 11117), (39, 11303), (40, 11309),

Gene: Redno2_15 Start: 10287, Stop: 10781, Start Num: 7
Candidate Starts for Redno2_15:
(3, 10116), (4, 10203), (Start: 6 @10272 has 15 MA's), (Start: 7 @10287 has 21 MA's), (9, 10296), (13, 10338), (17, 10380), (19, 10419), (23, 10446), (27, 10500), (28, 10509), (31, 10536), (39, 10695), (40, 10701),

Gene: Schatzie_14 Start: 9811, Stop: 10320, Start Num: 6
Candidate Starts for Schatzie_14:
(4, 9742), (Start: 6 @9811 has 15 MA's), (Start: 7 @9826 has 21 MA's), (9, 9835), (13, 9877), (17, 9919), (19, 9958), (23, 9985), (27, 10039), (28, 10048), (39, 10234), (40, 10240),

Gene: Squint_16 Start: 9809, Stop: 10312, Start Num: 7
Candidate Starts for Squint_16:
(Start: 7 @9809 has 21 MA's), (14, 9857), (18, 9941), (20, 9947), (21, 9971), (23, 9977), (24, 9980), (27, 10034), (30, 10055), (34, 10106), (36, 10178), (39, 10244), (41, 10292),

Gene: Stellammi_182 Start: 81233, Stop: 81754, Start Num: 8
Candidate Starts for Stellammi_182:
(5, 81209), (Start: 8 @81233 has 1 MA's), (12, 81260), (15, 81287), (22, 81398), (29, 81464), (33, 81521), (35, 81575), (36, 81596), (38, 81626), (39, 81665), (43, 81740),

Gene: Thibault_12 Start: 10087, Stop: 10581, Start Num: 7
Candidate Starts for Thibault_12:
(4, 10003), (Start: 6 @10072 has 15 MA's), (Start: 7 @10087 has 21 MA's), (9, 10096), (13, 10138), (17, 10180), (19, 10219), (23, 10246), (27, 10300), (28, 10309), (31, 10336), (39, 10495), (40, 10501),

Gene: ThreeRngTarjay_15 Start: 10651, Stop: 11145, Start Num: 7
Candidate Starts for ThreeRngTarjay_15:

(4, 10567), (Start: 6 @10636 has 15 MA's), (Start: 7 @10651 has 21 MA's), (9, 10660), (13, 10702), (17, 10744), (19, 10783), (23, 10810), (27, 10864), (28, 10873), (39, 11059), (40, 11065),

Gene: Tweety_102 Start: 55234, Stop: 55737, Start Num: 6
Candidate Starts for Tweety_102:
(1, 54907), (2, 55036), (Start: 6 @55234 has 15 MA's), (35, 55594), (37, 55636), (38, 55642), (39, 55681), (41, 55729),

Gene: Wanda_16 Start: 10079, Stop: 10588, Start Num: 6
Candidate Starts for Wanda_16:
(4, 10010), (Start: 6 @10079 has 15 MA's), (Start: 7 @10094 has 21 MA's), (9, 10103), (13, 10145), (17, 10187), (19, 10226), (23, 10253), (27, 10307), (28, 10316), (39, 10502), (40, 10508),

Gene: Xiaokay_13 Start: 10103, Stop: 10597, Start Num: 7
Candidate Starts for Xiaokay_13:
(4, 10019), (Start: 6 @10088 has 15 MA's), (Start: 7 @10103 has 21 MA's), (9, 10112), (13, 10154), (17, 10196), (19, 10235), (23, 10262), (27, 10316), (28, 10325), (31, 10352), (39, 10511), (40, 10517),

Gene: Yeet_14 Start: 9811, Stop: 10320, Start Num: 6
Candidate Starts for Yeet_14:
(4, 9742), (Start: 6 @9811 has 15 MA's), (Start: 7 @9826 has 21 MA's), (9, 9835), (13, 9877), (17, 9919), (19, 9958), (23, 9985), (27, 10039), (28, 10048), (39, 10234), (40, 10240),

Gene: Zelink_16 Start: 10679, Stop: 11173, Start Num: 7
Candidate Starts for Zelink_16:
(3, 10508), (4, 10595), (Start: 6 @10664 has 15 MA's), (Start: 7 @10679 has 21 MA's), (9, 10688), (13, 10730), (17, 10772), (19, 10811), (23, 10838), (27, 10892), (28, 10901), (39, 11087), (40, 11093),