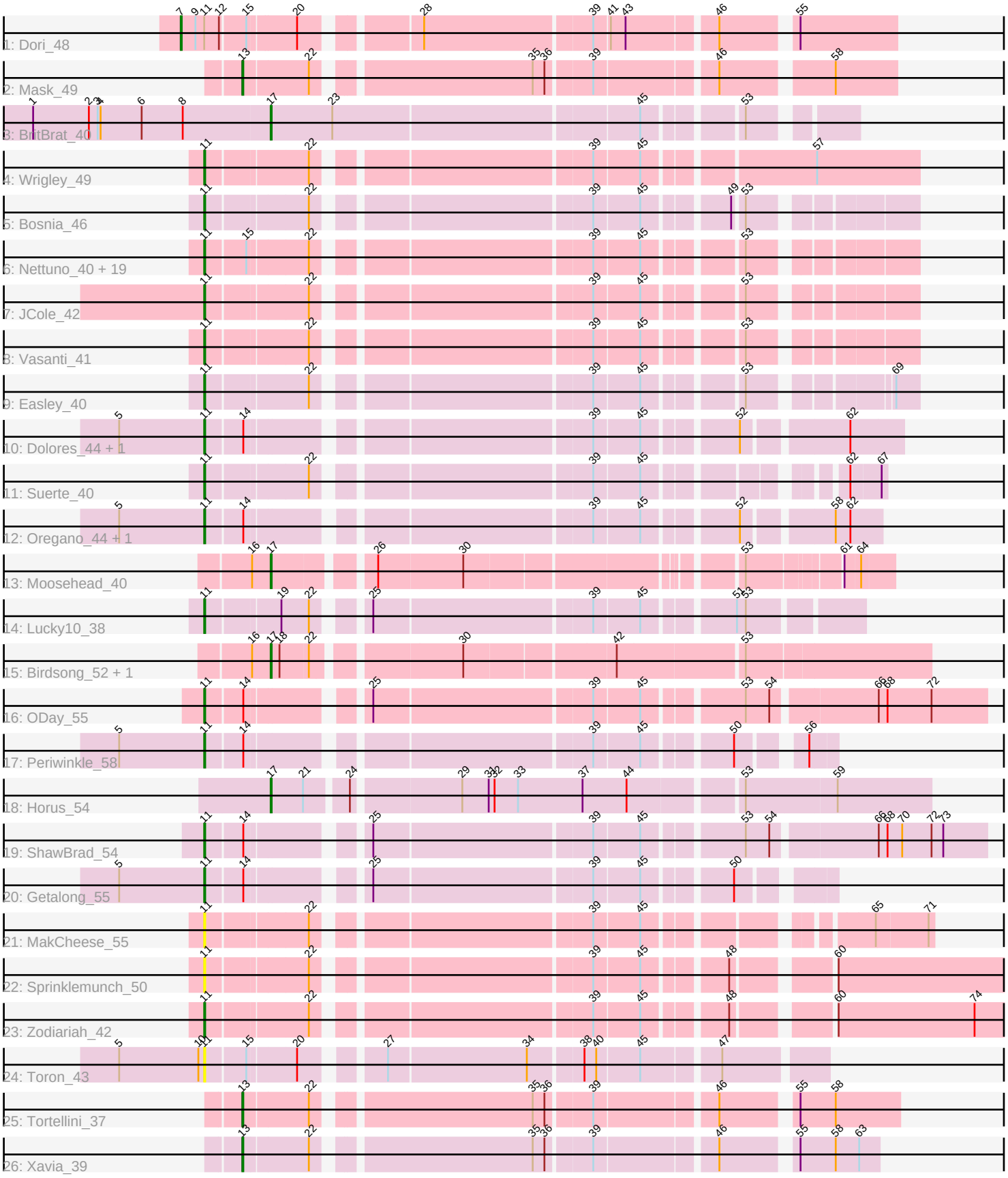
Pham 345844


1: Dori_48
2: Mask_49
3: BritBrat_40
4: Wrigley_49
5: Bosnia_46
6: Nettuno_40 + 19
7: JCole_42
8: Vasanti_41
9: Easley_40
10: Dolores_44 + 1
11: Suerte_40
12: Oregano_44 + 1
13: Moosehead_40
14: Lucky10_38
15: Birdsong_52 + 1
16: ODay_55
17: Periwinkle_58
18: Horus_54
19: ShawBrad_54
20: Getalong_55
21: MakCheese_55
22: Sprinklemunch_50
23: Zodiariah_42
24: Toron_43
25: Tortellini_37
26: Xavia_39

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 345844 Report

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

Pham number 345844 has 48 members, 5 are drafts.

Phages represented in each track:
- Track 1 : Dori_48
- Track 2 : Mask_49
- Track 3 : BritBrat_40
- Track 4 : Wrigley_49
- Track 5 : Bosnia_46
- Track 6 : Nettuno_40, Lamberg_40, Whiteclaw_44, GemG_44, Floral_42, Gizermo_44, Ebert_46, Matteo_37, Sahara_43, Mocha12_44, Sproutie_44, Bjanes7_41, Savage_44, Yinzer_44, Jalleen_44, TuertoX_44, Pollux_44, Cynthia_44, Clap_44, Haley23_44
- Track 7 : JCole_42
- Track 8 : Vasanti_41
- Track 9 : Easley_40
- Track 10 : Dolores_44, WinkNick_45
- Track 11 : Suerte_40
- Track 12 : Oregano_44, Annalisa_41
- Track 13 : Moosehead_40
- Track 14 : Lucky10_38
- Track 15 : Birdsong_52, Asapag_52
- Track 16 : ODay_55
- Track 17 : Periwinkle_58
- Track 18 : Horus_54
- Track 19 : ShawBrad_54
- Track 20 : Getalong_55
- Track 21 : MakCheese_55
- Track 22 : Sprinklemunch_50
- Track 23 : Zodiariah_42
- Track 24 : Toron_43
- Track 25 : Tortellini_37
- Track 26 : Xavia_39

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

The start number called the most often in the published annotations is 11, it was called in 34 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Annalisa_41, Bjanes7_41, Bosnia_46, Clap_44, Cynthia_44, Dolores_44, Easley_40, Ebert_46, Floral_42, GemG_44, Getalong_55, Gizermo_44, Haley23_44, JCole_42, Jalleen_44, Lamberg_40, Lucky10_38, MakCheese_55, Matteo_37, Mocha12_44, Nettuno_40, ODay_55, Oregano_44, Periwinkle_58, Pollux_44, Sahara_43, Savage_44, ShawBrad_54, Sprinklemunch_50, Sproutie_44, Suerte_40, Toron_43, TuertoX_44, Vasanti_41, Whiteclaw_44, WinkNick_45, Wrigley_49, Yinzer_44, Zodiariah_42,

Genes that have the "Most Annotated" start but do not call it:
• Dori_48,

Genes that do not have the "Most Annotated" start:
• Asapag_52, Birdsong_52, BritBrat_40, Horus_54, Mask_49, Moosehead_40, Tortellini_37, Xavia_39,

Summary by start number:

Start 7:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dori_48 (AD),

Start 11:
• Found in 40 of 48 (83.3%) of genes in pham
• Manual Annotations of this start: 34 of 43
• Called 97.5% of time when present
• Phage (with cluster) where this start called: Annalisa_41 (CZ4), Bjanes7_41 (CZ2), Bosnia_46 (CZ1), Clap_44 (CZ2), Cynthia_44 (CZ2), Dolores_44 (CZ4), Easley_40 (CZ4), Ebert_46 (CZ2), Floral_42 (CY1), GemG_44 (CZ2), Getalong_55 (DN1), Gizermo_44 (CZ2), Haley23_44 (CZ2), JCole_42 (CZ2), Jalleen_44 (CZ2), Lamberg_40 (CZ2), Lucky10_38 (DH), MakCheese_55 (DW), Matteo_37 (CZ2), Mocha12_44 (CZ2), Nettuno_40 (CZ2), ODay_55 (DN), Oregano_44 (CZ4), Periwinkle_58 (DN1), Pollux_44 (CY1), Sahara_43 (CZ2), Savage_44 (CZ2), ShawBrad_54 (DN1), Sprinklemunch_50 (DW), Sproutie_44 (CZ2), Suerte_40 (CZ4), Toron_43 (F6), TuertoX_44 (CZ2), Vasanti_41 (CZ2), Whiteclaw_44 (CZ2), WinkNick_45 (CZ4), Wrigley_49 (CY4), Yinzer_44 (CZ2), Zodiariah_42 (DW),

Start 13:
• Found in 3 of 48 (6.2%) of genes in pham
• Manual Annotations of this start: 3 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mask_49 (AD), Tortellini_37 (P2), Xavia_39 (P3),

Start 17:
• Found in 5 of 48 (10.4%) of genes in pham
• Manual Annotations of this start: 5 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Asapag_52 (DN1), Birdsong_52 (DN), BritBrat_40 (CY2), Horus_54 (DN1), Moosehead_40 (CZ6),

Summary by clusters:

There are 15 clusters represented in this pham: DN, P2, CY2, AD, F6, CY4, CZ2, P3, CZ1, CZ6, CY1, CZ4, DN1, DH, DW,

Info for manual annotations of cluster AD:
•Start number 7 was manually annotated 1 time for cluster AD.
•Start number 13 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster CY1:
•Start number 11 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 17 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY4:
•Start number 11 was manually annotated 1 time for cluster CY4.

Info for manual annotations of cluster CZ1:
•Start number 11 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 11 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ4:
•Start number 11 was manually annotated 6 times for cluster CZ4.

Info for manual annotations of cluster CZ6:
•Start number 17 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:
•Start number 11 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:
•Start number 11 was manually annotated 1 time for cluster DN.
•Start number 17 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 11 was manually annotated 3 times for cluster DN1.
•Start number 17 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DW:
•Start number 11 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster P2:
•Start number 13 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 13 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: Annalisa_41 Start: 32062, Stop: 31457, Start Num: 11
Candidate Starts for Annalisa_41:
(5, 32149), (Start: 11 @32062 has 34 MA's), (14, 32026), (39, 31714), (45, 31669), (52, 31585), (58, 31504), (62, 31489),

Gene: Asapag_52 Start: 35508, Stop: 34891, Start Num: 17
Candidate Starts for Asapag_52:
(16, 35526), (Start: 17 @35508 has 5 MA's), (18, 35499), (22, 35472), (30, 35340), (42, 35196), (53, 35073),

Gene: Birdsong_52 Start: 35729, Stop: 35112, Start Num: 17
Candidate Starts for Birdsong_52:
(16, 35747), (Start: 17 @35729 has 5 MA's), (18, 35720), (22, 35693), (30, 35561), (42, 35417), (53, 35294),

Gene: Bjanes7_41 Start: 31912, Stop: 31289, Start Num: 11
Candidate Starts for Bjanes7_41:
(Start: 11 @31912 has 34 MA's), (15, 31873), (22, 31816), (39, 31564), (45, 31519), (53, 31435),

Gene: Bosnia_46 Start: 38276, Stop: 37653, Start Num: 11
Candidate Starts for Bosnia_46:
(Start: 11 @38276 has 34 MA's), (22, 38180), (39, 37928), (45, 37883), (49, 37808), (53, 37799),

Gene: BritBrat_40 Start: 34130, Stop: 33591, Start Num: 17
Candidate Starts for BritBrat_40:
(1, 34370), (2, 34313), (3, 34304), (4, 34301), (6, 34259), (8, 34217), (Start: 17 @34130 has 5 MA's), (23, 34067), (45, 33767), (53, 33683),

Gene: Clap_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Clap_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Cynthia_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Cynthia_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Dolores_44 Start: 33141, Stop: 32515, Start Num: 11
Candidate Starts for Dolores_44:
(5, 33228), (Start: 11 @33141 has 34 MA's), (14, 33105), (39, 32793), (45, 32748), (52, 32664), (62, 32568),

Gene: Dori_48 Start: 44088, Stop: 43438, Start Num: 7
Candidate Starts for Dori_48:
(Start: 7 @44088 has 1 MA's), (9, 44073), (Start: 11 @44064 has 34 MA's), (12, 44049), (15, 44025), (20, 43980), (28, 43881), (39, 43716), (41, 43701), (43, 43686), (46, 43602), (55, 43536),

Gene: Easley_40 Start: 31673, Stop: 31053, Start Num: 11
Candidate Starts for Easley_40:
(Start: 11 @31673 has 34 MA's), (22, 31577), (39, 31325), (45, 31280), (53, 31196), (69, 31076),

Gene: Ebert_46 Start: 32015, Stop: 31392, Start Num: 11

Candidate Starts for Ebert_46:
(Start: 11 @32015 has 34 MA's), (15, 31976), (22, 31919), (39, 31667), (45, 31622), (53, 31538),

Gene: Floral_42 Start: 35946, Stop: 35323, Start Num: 11
Candidate Starts for Floral_42:
(Start: 11 @35946 has 34 MA's), (15, 35907), (22, 35850), (39, 35598), (45, 35553), (53, 35469),

Gene: GemG_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for GemG_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Getalong_55 Start: 37531, Stop: 36980, Start Num: 11
Candidate Starts for Getalong_55:
(5, 37618), (Start: 11 @37531 has 34 MA's), (14, 37495), (25, 37396), (39, 37183), (45, 37138), (50, 37060),

Gene: Gizermo_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Gizermo_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Haley23_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Haley23_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Horus_54 Start: 36955, Stop: 36323, Start Num: 17
Candidate Starts for Horus_54:
(Start: 17 @36955 has 5 MA's), (21, 36922), (24, 36883), (29, 36781), (31, 36754), (32, 36748), (33, 36724), (37, 36658), (44, 36613), (53, 36508), (59, 36418),

Gene: JCole_42 Start: 31109, Stop: 30486, Start Num: 11
Candidate Starts for JCole_42:
(Start: 11 @31109 has 34 MA's), (22, 31013), (39, 30761), (45, 30716), (53, 30632),

Gene: Jalleen_44 Start: 31730, Stop: 31107, Start Num: 11
Candidate Starts for Jalleen_44:
(Start: 11 @31730 has 34 MA's), (15, 31691), (22, 31634), (39, 31382), (45, 31337), (53, 31253),

Gene: Lamberg_40 Start: 30600, Stop: 29977, Start Num: 11
Candidate Starts for Lamberg_40:
(Start: 11 @30600 has 34 MA's), (15, 30561), (22, 30504), (39, 30252), (45, 30207), (53, 30123),

Gene: Lucky10_38 Start: 30583, Stop: 29993, Start Num: 11
Candidate Starts for Lucky10_38:
(Start: 11 @30583 has 34 MA's), (19, 30514), (22, 30487), (25, 30448), (39, 30235), (45, 30190), (51, 30109), (53, 30100),

Gene: MakCheese_55 Start: 39149, Stop: 38517, Start Num: 11
Candidate Starts for MakCheese_55:
(Start: 11 @39149 has 34 MA's), (22, 39053), (39, 38801), (45, 38756), (65, 38573), (71, 38522),

Gene: Mask_49 Start: 45210, Stop: 44614, Start Num: 13
Candidate Starts for Mask_49:

(Start: 13 @45210 has 3 MA's), (22, 45147), (35, 44946), (36, 44934), (39, 44892), (46, 44778), (58, 44676),

Gene: Matteo_37 Start: 29642, Stop: 29019, Start Num: 11
Candidate Starts for Matteo_37:
(Start: 11 @29642 has 34 MA's), (15, 29603), (22, 29546), (39, 29294), (45, 29249), (53, 29165),

Gene: Mocha12_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Mocha12_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Moosehead_40 Start: 28758, Stop: 28216, Start Num: 17
Candidate Starts for Moosehead_40:
(16, 28776), (Start: 17 @28758 has 5 MA's), (26, 28674), (30, 28590), (53, 28344), (61, 28263), (64, 28248),

Gene: Nettuno_40 Start: 30600, Stop: 29977, Start Num: 11
Candidate Starts for Nettuno_40:
(Start: 11 @30600 has 34 MA's), (15, 30561), (22, 30504), (39, 30252), (45, 30207), (53, 30123),

Gene: ODay_55 Start: 36421, Stop: 35705, Start Num: 11
Candidate Starts for ODay_55:
(Start: 11 @36421 has 34 MA's), (14, 36385), (25, 36286), (39, 36073), (45, 36028), (53, 35938), (54, 35914), (66, 35815), (68, 35806), (72, 35761),

Gene: Oregano_44 Start: 32695, Stop: 32090, Start Num: 11
Candidate Starts for Oregano_44:
(5, 32782), (Start: 11 @32695 has 34 MA's), (14, 32659), (39, 32347), (45, 32302), (52, 32218), (58, 32137), (62, 32122),

Gene: Periwinkle_58 Start: 36818, Stop: 36267, Start Num: 11
Candidate Starts for Periwinkle_58:
(5, 36905), (Start: 11 @36818 has 34 MA's), (14, 36782), (39, 36470), (45, 36425), (50, 36347), (56, 36293),

Gene: Pollux_44 Start: 35946, Stop: 35323, Start Num: 11
Candidate Starts for Pollux_44:
(Start: 11 @35946 has 34 MA's), (15, 35907), (22, 35850), (39, 35598), (45, 35553), (53, 35469),

Gene: Sahara_43 Start: 31838, Stop: 31215, Start Num: 11
Candidate Starts for Sahara_43:
(Start: 11 @31838 has 34 MA's), (15, 31799), (22, 31742), (39, 31490), (45, 31445), (53, 31361),

Gene: Savage_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Savage_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: ShawBrad_54 Start: 34806, Stop: 34090, Start Num: 11
Candidate Starts for ShawBrad_54:
(Start: 11 @34806 has 34 MA's), (14, 34770), (25, 34671), (39, 34458), (45, 34413), (53, 34323), (54, 34299), (66, 34200), (68, 34191), (70, 34176), (72, 34146), (73, 34134),

Gene: Sprinklemunch_50 Start: 37971, Stop: 37237, Start Num: 11

Candidate Starts for Sprinklemunch_50:
(Start: 11 @37971 has 34 MA's), (22, 37875), (39, 37623), (45, 37578), (48, 37506), (60, 37422),

Gene: Sproutie_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Sproutie_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Suerte_40 Start: 32240, Stop: 31662, Start Num: 11
Candidate Starts for Suerte_40:
(Start: 11 @32240 has 34 MA's), (22, 32144), (39, 31892), (45, 31847), (62, 31694), (67, 31667),

Gene: Toron_43 Start: 34837, Stop: 34274, Start Num: 11
Candidate Starts for Toron_43:
(5, 34924), (10, 34843), (Start: 11 @34837 has 34 MA's), (15, 34798), (20, 34753), (27, 34687), (34, 34549), (38, 34498), (40, 34486), (45, 34444), (47, 34372),

Gene: Tortellini_37 Start: 33401, Stop: 32802, Start Num: 13
Candidate Starts for Tortellini_37:
(Start: 13 @33401 has 3 MA's), (22, 33338), (35, 33137), (36, 33125), (39, 33083), (46, 32969), (55, 32903), (58, 32867),

Gene: TuertoX_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for TuertoX_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Vasanti_41 Start: 31106, Stop: 30483, Start Num: 11
Candidate Starts for Vasanti_41:
(Start: 11 @31106 has 34 MA's), (22, 31010), (39, 30758), (45, 30713), (53, 30629),

Gene: Whiteclaw_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Whiteclaw_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: WinkNick_45 Start: 33064, Stop: 32438, Start Num: 11
Candidate Starts for WinkNick_45:
(5, 33151), (Start: 11 @33064 has 34 MA's), (14, 33028), (39, 32716), (45, 32671), (52, 32587), (62, 32491),

Gene: Wrigley_49 Start: 35786, Stop: 35133, Start Num: 11
Candidate Starts for Wrigley_49:
(Start: 11 @35786 has 34 MA's), (22, 35690), (39, 35438), (45, 35393), (57, 35237),

Gene: Xavia_39 Start: 33984, Stop: 33406, Start Num: 13
Candidate Starts for Xavia_39:
(Start: 13 @33984 has 3 MA's), (22, 33921), (35, 33720), (36, 33708), (39, 33666), (46, 33552), (55, 33486), (58, 33450), (63, 33426),

Gene: Yinzer_44 Start: 32091, Stop: 31468, Start Num: 11
Candidate Starts for Yinzer_44:
(Start: 11 @32091 has 34 MA's), (15, 32052), (22, 31995), (39, 31743), (45, 31698), (53, 31614),

Gene: Zodiariah_42 Start: 36174, Stop: 35443, Start Num: 11
Candidate Starts for Zodiariah_42:

(Start: 11 @36174 has 34 MA's), (22, 36078), (39, 35826), (45, 35781), (48, 35709), (60, 35625), (74, 35487),