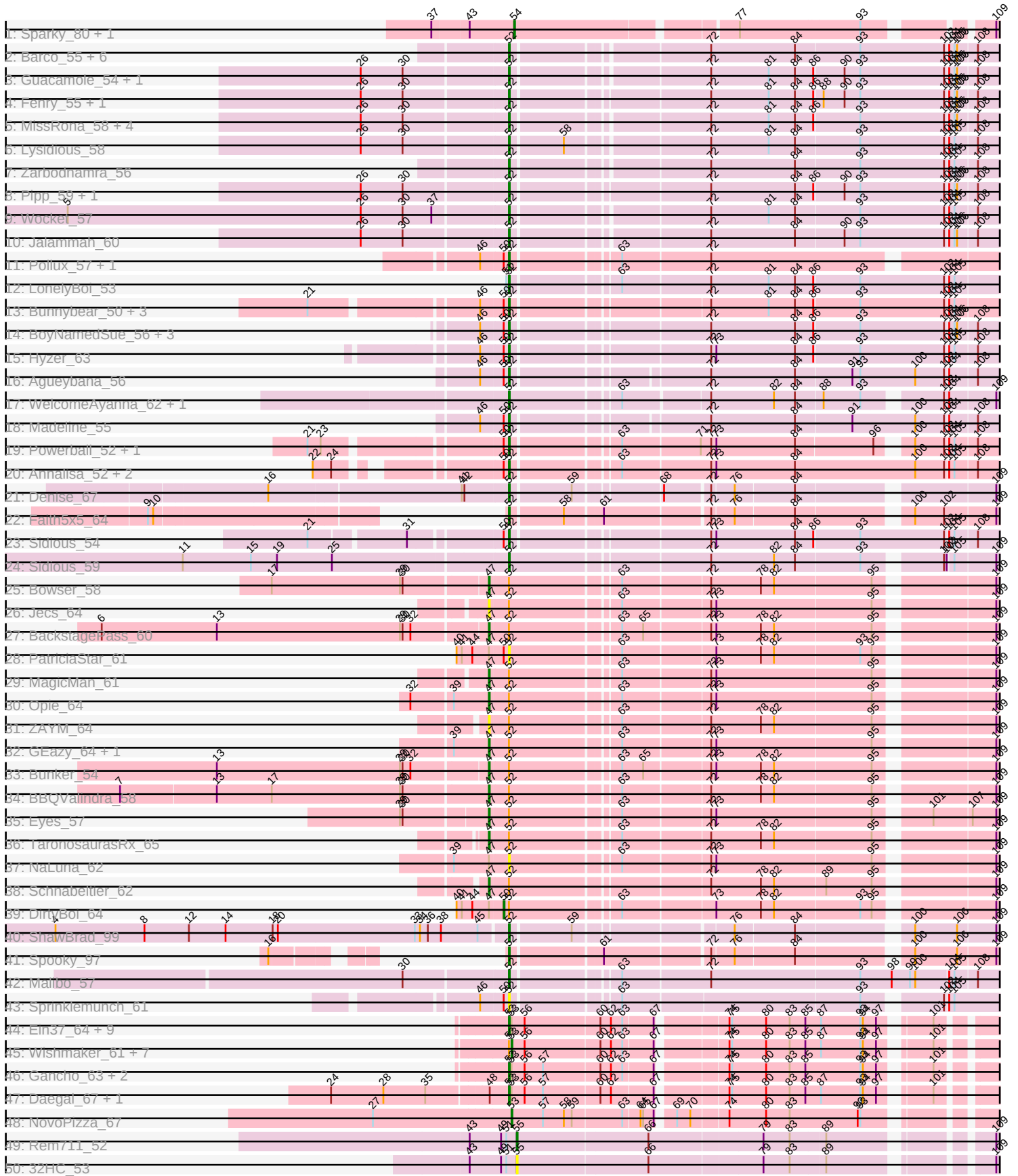
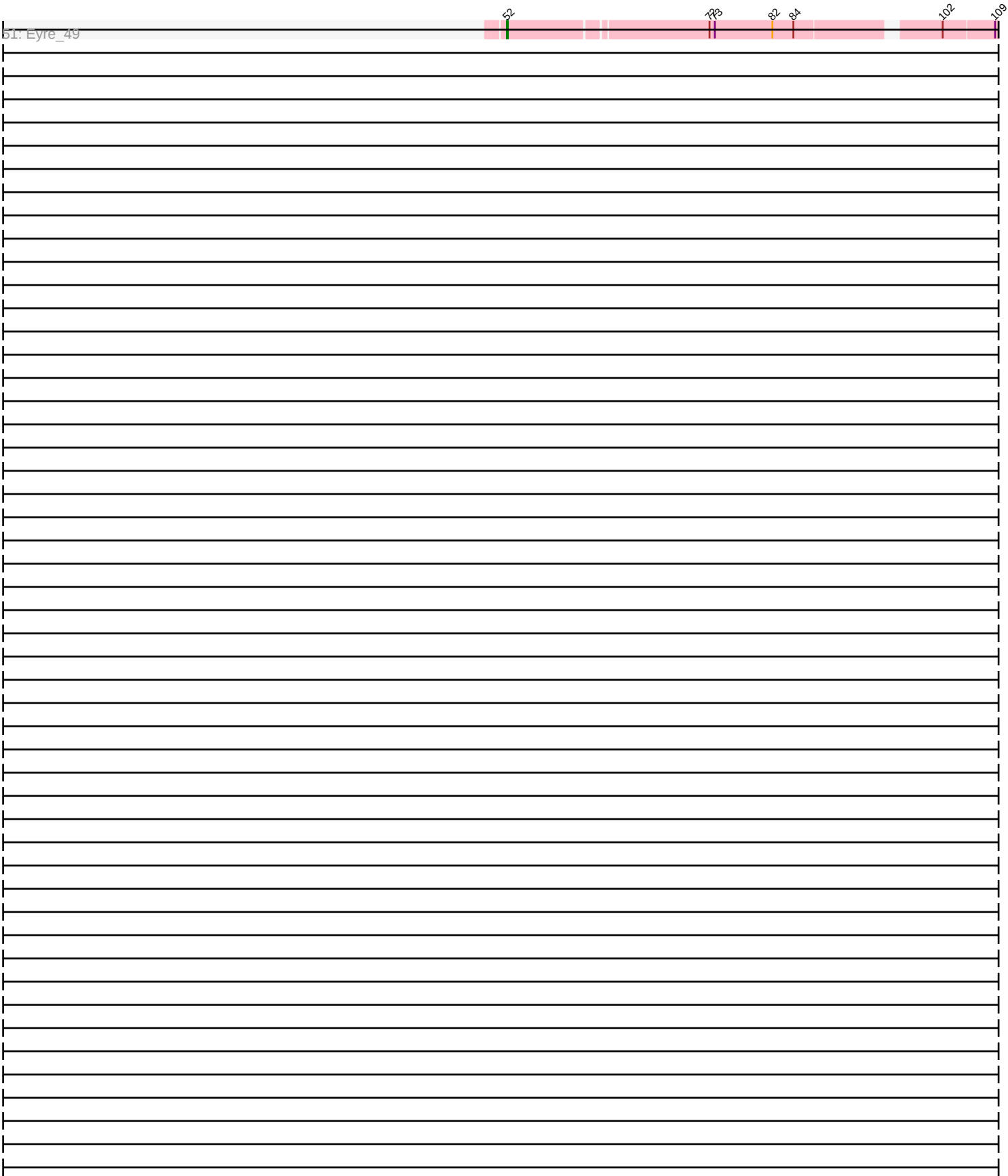


Zoomed Pham 330706



Zoomed Pham 330706



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 330706 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330706 has 96 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Sparky_80, Farewell_81
- Track 2 : Barco_55, Hitter_57, Delian_60, CaptainKirk2_57, MintFen_57, Samba_56, Zilla_55
- Track 3 : Guacamole_54, JasperJr_54
- Track 4 : Fenry_55, Petra_53
- Track 5 : MissRona_58, Gambino_60, Mellie_55, Azula_58, Blueberry_57
- Track 6 : Lysidious_58
- Track 7 : Zarbodnamra_56
- Track 8 : Pipp_59, Walrus_55
- Track 9 : Wocket_57
- Track 10 : Jalammah_60
- Track 11 : Pollux_57, Floral_55
- Track 12 : LonelyBoi_53
- Track 13 : Bunnybear_50, Madavieve_52, SushiChef_54, Maridalia_58
- Track 14 : BoyNamedSue_56, Marteena_53, AlumE_56, EMSquaredA_54
- Track 15 : Hyzer_63
- Track 16 : Agueybana_56
- Track 17 : WelcomeAyanna_62, ThankyouJordi_62
- Track 18 : Madeline_55
- Track 19 : Powerball_52, PhriskyACE_50
- Track 20 : Annalisa_52, Oregano_55, Tuti_50
- Track 21 : Denise_67
- Track 22 : Faith5x5_64
- Track 23 : Sidious_54
- Track 24 : Sidious_59
- Track 25 : Bowser_58
- Track 26 : Jecs_64
- Track 27 : BackstagePass_60
- Track 28 : PatriciaStar_61
- Track 29 : MagicMan_61
- Track 30 : Opie_64
- Track 31 : ZAYM_64
- Track 32 : GEazy_64, HannahD_61
- Track 33 : Bunker_54
- Track 34 : BBQValindra_58
- Track 35 : Eyes_57
- Track 36 : TaronosaurusRx_65

- Track 37 : NaLuna_62
- Track 38 : Schnabeltier_62
- Track 39 : DirtyBoi_64
- Track 40 : ShawBrad_99
- Track 41 : Spooky_97
- Track 42 : Malibo_57
- Track 43 : Sprinklemunch_61
- Track 44 : Ein37_64, Kinbote_63, DeepSoil15_64, HH92_63, Webster2_64, LilHazelnut_64, Giles_61, Dewey_61, Hadrien_63, Evanesce_63
- Track 45 : Wishmaker_61, Ubuntu_64, Luna22_61, BloominB_63, Luke_63, Hail_61, Amymech_64, Forge_61
- Track 46 : Gancho_63, OBUpride_64, Gravaillia_62
- Track 47 : Daegal_67, Amochick_65
- Track 48 : NovoPizza_67
- Track 49 : Rem711_52
- Track 50 : 32HC_53
- Track 51 : Eyre_49

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

The start number called the most often in the published annotations is 52, it was called in 64 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agueybana_56, AlumE_56, Amochick_65, Annalisa_52, Azula_58, Barco_55, Blueberry_57, BoyNamedSue_56, Bunnybear_50, CaptainKirk2_57, Daegal_67, DeepSoil15_64, Delian_60, Denise_67, Dewey_61, EMSquaredA_54, Ein37_64, Evanesce_63, Eyre_49, Faith5x5_64, Fenry_55, Floral_55, Gambino_60, Gancho_63, Giles_61, Gravaillia_62, Guacamole_54, HH92_63, Hadrien_63, Hitter_57, Hyzer_63, Jalammah_60, JasperJr_54, Kinbote_63, LilHazelnut_64, LonelyBoi_53, Lysidious_58, Madavieve_52, Madeline_55, Malibo_57, Maridalia_58, Marteenaa_53, Mellie_55, MintFen_57, MissRona_58, NaLuna_62, OBUpride_64, Oregano_55, PatriciaStar_61, Petra_53, PhriskyACE_50, Pipp_59, Pollux_57, Powerball_52, Samba_56, ShawBrad_99, Sidious_54, Sidious_59, Spooky_97, Sprinklemunch_61, SushiChef_54, ThankyouJordi_62, Tuti_50, Walrus_55, Webster2_64, WelcomeAyanna_62, Wocket_57, Zarbodnamra_56, Zilla_55,

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

- Amymech_64, BBQValindra_58, BackstagePass_60, BloominB_63, Bowser_58, Bunker_54, DirtyBoi_64, Eyes_57, Forge_61, GEazy_64, Hail_61, HannahD_61, Jecs_64, Luke_63, Luna22_61, MagicMan_61, Opie_64, Schnabeltier_62, TaronosaurusRx_65, Ubuntu_64, Wishmaker_61, ZAYM_64,

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

- 32HC_53, Farewell_81, NovoPizza_67, Rem711_52, Sparky_80,

Summary by start number:

Start 47:

- Found in 16 of 96 (16.7%) of genes in pham

- Manual Annotations of this start: 11 of 88
- Called 81.2% of time when present
- Phage (with cluster) where this start called: BBQValindra_58 (DB), BackstagePass_60 (DB), Bowser_58 (DB), Bunker_54 (DB), Eyes_57 (DB), GEazy_64 (DB), HannahD_61 (DB), Jecs_64 (DB), MagicMan_61 (DB), Opie_64 (DB), Schnabeltier_62 (DB), TaronosaurusRx_65 (DB), ZAYM_64 (DB),

Start 50:

- Found in 22 of 96 (22.9%) of genes in pham
- Manual Annotations of this start: 1 of 88
- Called 4.5% of time when present
- Phage (with cluster) where this start called: DirtyBoi_64 (DB),

Start 52:

- Found in 91 of 96 (94.8%) of genes in pham
- Manual Annotations of this start: 64 of 88
- Called 75.8% of time when present
- Phage (with cluster) where this start called: Agueybana_56 (CZ1), AlumE_56 (CZ1), Amochick_65 (Q), Annalisa_52 (CZ4), Azula_58 (CV), Barco_55 (CV), Blueberry_57 (CV), BoyNamedSue_56 (CZ1), Bunnybear_50 (CZ), CaptainKirk2_57 (CV), Daegal_67 (Q), DeepSoil15_64 (Q), Delian_60 (CV), Denise_67 (CZ5), Dewey_61 (Q), EMSquaredA_54 (CY1), Ein37_64 (Q), Evanesce_63 (Q), Eyre_49 (singleton), Faith5x5_64 (CZ6), Fenry_55 (CV), Floral_55 (CY1), Gambino_60 (CV), Gancho_63 (Q), Giles_61 (Q), Gravaillia_62 (Q), Guacamole_54 (CV), HH92_63 (Q), Hadrien_63 (Q), Hitter_57 (CV), Hyzer_63 (CZ1), Jalammah_60 (CV), JasperJr_54 (CV), Kinbote_63 (Q), LilHazelNut_64 (Q), LonelyBoi_53 (CY7), Lysidious_58 (CV), Madavieve_52 (CZ1), Madeline_55 (CZ1), Malibo_57 (DW), Maridalia_58 (CZ1), Marteenaa_53 (CY1), Mellie_55 (CV), MintFen_57 (CV), MissRona_58 (CV), NaLuna_62 (DB), OBUpride_64 (Q), Oregano_55 (CZ4), PatriciaStar_61 (DB), Petra_53 (CV), PhriskyACE_50 (CZ4), Pipp_59 (CV), Pollux_57 (CY1), Powerball_52 (CZ4), Samba_56 (CV), ShawBrad_99 (DN1), Sidious_54 (CZ7), Sidious_59 (CZ7), Spooky_97 (DN2), Sprinklemunch_61 (DW), SushiChef_54 (CZ), ThankyouJordi_62 (CZ1), Tuti_50 (CZ4), Walrus_55 (CV), Webster2_64 (Q), WelcomeAyanna_62 (CZ1), Wocket_57 (CV), Zarbodnamra_56 (CV), Zilla_55 (CV),

Start 53:

- Found in 24 of 96 (25.0%) of genes in pham
- Manual Annotations of this start: 9 of 88
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Amymech_64 (Q), BloominB_63 (Q), Forge_61 (Q), Hail_61 (Q), Luke_63 (Q), Luna22_61 (Q), NovoPizza_67 (Q), Ubuntu_64 (Q), Wishmaker_61 (Q),

Start 54:

- Found in 2 of 96 (2.1%) of genes in pham
- Manual Annotations of this start: 2 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_81 (AF), Sparky_80 (AF),

Start 55:

- Found in 2 of 96 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 88
- Called 100.0% of time when present

- Phage (with cluster) where this start called: 32HC_53 (Z), Rem711_52 (Z),

Summary by clusters:

There are 17 clusters represented in this pham: CZ7, CY1, CY7, AF, CZ6, CZ1, DB, singleton, CZ4, CZ5, Q, CZ, DN1, DN2, DW, Z, CV,

Info for manual annotations of cluster AF:

- Start number 54 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster CV:

- Start number 52 was manually annotated 22 times for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 52 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY7:

- Start number 52 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:

- Start number 52 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 52 was manually annotated 8 times for cluster CZ1.

Info for manual annotations of cluster CZ4:

- Start number 52 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 52 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 52 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 52 was manually annotated 2 times for cluster CZ7.

Info for manual annotations of cluster DB:

- Start number 47 was manually annotated 11 times for cluster DB.
- Start number 50 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN1:

- Start number 52 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 52 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DW:

- Start number 52 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster Q:

- Start number 52 was manually annotated 15 times for cluster Q.
- Start number 53 was manually annotated 9 times for cluster Q.

Info for manual annotations of cluster Z:

- Start number 55 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_53 Start: 36136, Stop: 36690, Start Num: 55

Candidate Starts for 32HC_53:

(43, 36082), (49, 36118), (51, 36124), (Start: 55 @36136 has 1 MA's), (66, 36283), (79, 36409), (83, 36439), (89, 36478), (109, 36631), (110, 36640),

Gene: Agueybana_56 Start: 39653, Stop: 40237, Start Num: 52

Candidate Starts for Agueybana_56:

(46, 39623), (Start: 50 @39647 has 1 MA's), (Start: 52 @39653 has 64 MA's), (72, 39854), (84, 39950), (91, 40013), (93, 40022), (100, 40085), (102, 40118), (104, 40121), (108, 40151),

Gene: AlumE_56 Start: 39435, Stop: 40025, Start Num: 52

Candidate Starts for AlumE_56:

(46, 39405), (Start: 50 @39429 has 1 MA's), (Start: 52 @39435 has 64 MA's), (72, 39639), (84, 39735), (86, 39756), (93, 39807), (102, 39903), (104, 39906), (105, 39912), (106, 39915), (108, 39936), (116, 40005),

Gene: Amochick_65 Start: 44443, Stop: 44997, Start Num: 52

Candidate Starts for Amochick_65:

(24, 44248), (28, 44308), (35, 44356), (48, 44422), (Start: 52 @44443 has 64 MA's), (Start: 53 @44446 has 9 MA's), (56, 44461), (57, 44482), (60, 44545), (62, 44557), (67, 44602), (74, 44671), (75, 44674), (80, 44713), (83, 44740), (85, 44758), (87, 44776), (93, 44821), (94, 44824), (97, 44839), (101, 44884), (110, 44944), (113, 44962),

Gene: Amymech_64 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for Amymech_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Annalisa_52 Start: 35792, Stop: 36379, Start Num: 52

Candidate Starts for Annalisa_52:

(22, 35615), (24, 35636), (Start: 50 @35786 has 1 MA's), (Start: 52 @35792 has 64 MA's), (63, 35900), (72, 35996), (73, 36002), (84, 36092), (100, 36230), (102, 36263), (104, 36266), (105, 36272), (108, 36296),

Gene: Azula_58 Start: 39149, Stop: 39736, Start Num: 52

Candidate Starts for Azula_58:

(26, 38987), (30, 39035), (Start: 52 @39149 has 64 MA's), (72, 39350), (81, 39416), (84, 39446), (86, 39467), (93, 39518), (102, 39614), (104, 39617), (105, 39623), (106, 39626), (108, 39647),

Gene: BBQValindra_58 Start: 41020, Stop: 41751, Start Num: 47

Candidate Starts for BBQValindra_58:

(7, 40606), (13, 40714), (17, 40777), (29, 40924), (30, 40927), (Start: 47 @41020 has 11 MA's), (Start: 52 @41038 has 64 MA's), (63, 41152), (72, 41245), (78, 41302), (82, 41317), (95, 41425), (109, 41545), (111, 41557),

Gene: BackstagePass_60 Start: 40434, Stop: 41168, Start Num: 47

Candidate Starts for BackstagePass_60:

(6, 39999), (13, 40131), (29, 40341), (30, 40344), (32, 40353), (Start: 47 @40434 has 11 MA's), (Start: 52 @40452 has 64 MA's), (63, 40566), (65, 40590), (72, 40659), (73, 40665), (78, 40716), (82, 40731), (95, 40839), (109, 40959), (122, 41157),

Gene: Barco_55 Start: 36423, Stop: 37010, Start Num: 52

Candidate Starts for Barco_55:

(Start: 52 @36423 has 64 MA's), (72, 36624), (84, 36720), (93, 36792), (102, 36888), (104, 36891), (105, 36897), (106, 36900), (108, 36921),

Gene: BloominB_63 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for BloominB_63:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Blueberry_57 Start: 39149, Stop: 39736, Start Num: 52

Candidate Starts for Blueberry_57:

(26, 38987), (30, 39035), (Start: 52 @39149 has 64 MA's), (72, 39350), (81, 39416), (84, 39446), (86, 39467), (93, 39518), (102, 39614), (104, 39617), (105, 39623), (106, 39626), (108, 39647),

Gene: Bowser_58 Start: 40743, Stop: 41495, Start Num: 47

Candidate Starts for Bowser_58:

(17, 40503), (29, 40650), (30, 40653), (Start: 47 @40743 has 11 MA's), (Start: 52 @40761 has 64 MA's), (63, 40875), (72, 40968), (78, 41025), (82, 41040), (95, 41148), (109, 41268), (110, 41277), (111, 41280), (119, 41370), (120, 41442), (121, 41463),

Gene: BoyNamedSue_56 Start: 39435, Stop: 40025, Start Num: 52

Candidate Starts for BoyNamedSue_56:

(46, 39405), (Start: 50 @39429 has 1 MA's), (Start: 52 @39435 has 64 MA's), (72, 39639), (84, 39735), (86, 39756), (93, 39807), (102, 39903), (104, 39906), (105, 39912), (106, 39915), (108, 39936), (116, 40005),

Gene: Bunker_54 Start: 39327, Stop: 40058, Start Num: 47

Candidate Starts for Bunker_54:

(13, 39024), (29, 39234), (30, 39237), (32, 39246), (Start: 47 @39327 has 11 MA's), (Start: 52 @39345 has 64 MA's), (63, 39459), (65, 39483), (72, 39552), (73, 39558), (78, 39609), (82, 39624), (95, 39732), (109, 39852), (111, 39864),

Gene: Bunnybear_50 Start: 37443, Stop: 38027, Start Num: 52

Candidate Starts for Bunnybear_50:

(21, 37239), (46, 37413), (Start: 50 @37437 has 1 MA's), (Start: 52 @37443 has 64 MA's), (72, 37644), (81, 37710), (84, 37740), (86, 37761), (93, 37812), (102, 37908), (104, 37911), (105, 37917), (115, 38007),

Gene: CaptainKirk2_57 Start: 36662, Stop: 37249, Start Num: 52

Candidate Starts for CaptainKirk2_57:

(Start: 52 @36662 has 64 MA's), (72, 36863), (84, 36959), (93, 37031), (102, 37127), (104, 37130), (105, 37136), (106, 37139), (108, 37160),

Gene: Daegal_67 Start: 45005, Stop: 45559, Start Num: 52

Candidate Starts for Daegal_67:

(24, 44810), (28, 44870), (35, 44918), (48, 44984), (Start: 52 @45005 has 64 MA's), (Start: 53 @45008 has 9 MA's), (56, 45023), (57, 45044), (60, 45107), (62, 45119), (67, 45164), (74, 45233), (75, 45236), (80, 45275), (83, 45302), (85, 45320), (87, 45338), (93, 45383), (94, 45386), (97, 45401), (101, 45446), (110, 45506), (113, 45524),

Gene: DeepSoil15_64 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for DeepSoil15_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Delian_60 Start: 36660, Stop: 37247, Start Num: 52

Candidate Starts for Delian_60:

(Start: 52 @36660 has 64 MA's), (72, 36861), (84, 36957), (93, 37029), (102, 37125), (104, 37128), (105, 37134), (106, 37137), (108, 37158),

Gene: Denise_67 Start: 40135, Stop: 40689, Start Num: 52

Candidate Starts for Denise_67:

(16, 39871), (41, 40084), (42, 40087), (Start: 52 @40135 has 64 MA's), (59, 40201), (68, 40285), (72, 40333), (76, 40357), (84, 40423), (109, 40627),

Gene: Dewey_61 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Dewey_61:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: DirtyBoi_64 Start: 41042, Stop: 41764, Start Num: 50

Candidate Starts for DirtyBoi_64:

(40, 40991), (41, 40997), (44, 41009), (Start: 47 @41027 has 11 MA's), (Start: 50 @41042 has 1 MA's), (Start: 52 @41048 has 64 MA's), (63, 41162), (73, 41261), (78, 41312), (82, 41327), (93, 41423), (95, 41435), (109, 41555), (110, 41564),

Gene: EMSquaredA_54 Start: 38610, Stop: 39200, Start Num: 52

Candidate Starts for EMSquaredA_54:

(46, 38580), (Start: 50 @38604 has 1 MA's), (Start: 52 @38610 has 64 MA's), (72, 38814), (84, 38910), (86, 38931), (93, 38982), (102, 39078), (104, 39081), (105, 39087), (106, 39090), (108, 39111), (116, 39180),

Gene: Ein37_64 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Ein37_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Evanesce_63 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Evanesce_63:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Eyes_57 Start: 40795, Stop: 41526, Start Num: 47

Candidate Starts for Eyes_57:

(29, 40702), (30, 40705), (Start: 47 @40795 has 11 MA's), (Start: 52 @40813 has 64 MA's), (63, 40927), (72, 41020), (73, 41026), (95, 41200), (101, 41251), (107, 41293), (109, 41320), (110, 41329), (111, 41332),

Gene: Eyre_49 Start: 34637, Stop: 35221, Start Num: 52

Candidate Starts for Eyre_49:

(Start: 52 @34637 has 64 MA's), (72, 34853), (73, 34859), (82, 34925), (84, 34949), (102, 35096), (109, 35153), (110, 35162), (114, 35192),

Gene: Faith5x5_64 Start: 38441, Stop: 39004, Start Num: 52

Candidate Starts for Faith5x5_64:

(9, 38189), (10, 38195), (Start: 52 @38441 has 64 MA's), (58, 38498), (61, 38537), (72, 38648), (76, 38672), (84, 38738), (100, 38852), (102, 38885), (109, 38942), (110, 38951),

Gene: Farewell_81 Start: 52822, Stop: 53370, Start Num: 54

Candidate Starts for Farewell_81:

(37, 52732), (43, 52771), (Start: 54 @52822 has 2 MA's), (77, 53056), (93, 53191), (109, 53308), (110, 53317), (112, 53329),

Gene: Fenry_55 Start: 38167, Stop: 38757, Start Num: 52

Candidate Starts for Fenry_55:

(26, 38005), (30, 38053), (Start: 52 @38167 has 64 MA's), (72, 38371), (81, 38437), (84, 38467), (86, 38488), (88, 38497), (90, 38521), (93, 38539), (102, 38635), (104, 38638), (105, 38644), (106, 38647), (108, 38668),

Gene: Floral_55 Start: 40516, Stop: 41088, Start Num: 52

Candidate Starts for Floral_55:

(46, 40486), (Start: 50 @40510 has 1 MA's), (Start: 52 @40516 has 64 MA's), (63, 40624), (72, 40720),

Gene: Forge_61 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for Forge_61:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: GEazy_64 Start: 40986, Stop: 41714, Start Num: 47

Candidate Starts for GEazy_64:

(39, 40947), (Start: 47 @40986 has 11 MA's), (Start: 52 @41004 has 64 MA's), (63, 41118), (72, 41211), (73, 41217), (95, 41391), (109, 41511), (110, 41520), (111, 41523),

Gene: Gambino_60 Start: 39149, Stop: 39736, Start Num: 52

Candidate Starts for Gambino_60:

(26, 38987), (30, 39035), (Start: 52 @39149 has 64 MA's), (72, 39350), (81, 39416), (84, 39446), (86, 39467), (93, 39518), (102, 39614), (104, 39617), (105, 39623), (106, 39626), (108, 39647),

Gene: Gancho_63 Start: 43686, Stop: 44240, Start Num: 52

Candidate Starts for Gancho_63:

(Start: 52 @43686 has 64 MA's), (Start: 53 @43689 has 9 MA's), (56, 43704), (57, 43725), (60, 43788), (62, 43800), (63, 43812), (67, 43845), (74, 43914), (75, 43917), (80, 43956), (83, 43983), (85, 44001), (93, 44064), (94, 44067), (97, 44082), (101, 44127), (110, 44187), (112, 44199), (113, 44205),

Gene: Giles_61 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Giles_61:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Gravaillia_62 Start: 43967, Stop: 44521, Start Num: 52

Candidate Starts for Gravaillia_62:

(Start: 52 @43967 has 64 MA's), (Start: 53 @43970 has 9 MA's), (56, 43985), (57, 44006), (60, 44069), (62, 44081), (63, 44093), (67, 44126), (74, 44195), (75, 44198), (80, 44237), (83, 44264), (85, 44282), (93, 44345), (94, 44348), (97, 44363), (101, 44408), (110, 44468), (112, 44480), (113, 44486),

Gene: Guacamole_54 Start: 36889, Stop: 37476, Start Num: 52

Candidate Starts for Guacamole_54:

(26, 36727), (30, 36775), (Start: 52 @36889 has 64 MA's), (72, 37090), (81, 37156), (84, 37186), (86, 37207), (90, 37240), (93, 37258), (102, 37354), (104, 37357), (105, 37363), (106, 37366), (108, 37387), (116, 37456),

Gene: HH92_63 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for HH92_63:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Hadrien_63 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Hadrien_63:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Hail_61 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for Hail_61:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: HannahD_61 Start: 40353, Stop: 41081, Start Num: 47

Candidate Starts for HannahD_61:

(39, 40314), (Start: 47 @40353 has 11 MA's), (Start: 52 @40371 has 64 MA's), (63, 40485), (72, 40578), (73, 40584), (95, 40758), (109, 40878), (110, 40887), (111, 40890),

Gene: Hitter_57 Start: 36465, Stop: 37052, Start Num: 52

Candidate Starts for Hitter_57:

(Start: 52 @36465 has 64 MA's), (72, 36666), (84, 36762), (93, 36834), (102, 36930), (104, 36933), (105, 36939), (106, 36942), (108, 36963),

Gene: Hyzer_63 Start: 42350, Stop: 42940, Start Num: 52

Candidate Starts for Hyzer_63:

(46, 42320), (Start: 50 @42344 has 1 MA's), (Start: 52 @42350 has 64 MA's), (72, 42554), (73, 42560), (84, 42650), (86, 42671), (93, 42722), (102, 42818), (104, 42821), (105, 42827), (108, 42851),

Gene: Jalammah_60 Start: 39468, Stop: 40055, Start Num: 52

Candidate Starts for Jalammah_60:

(26, 39306), (30, 39354), (Start: 52 @39468 has 64 MA's), (72, 39669), (84, 39765), (90, 39819), (93, 39837), (102, 39933), (104, 39936), (105, 39942), (106, 39945), (108, 39966), (116, 40035),

Gene: JasperJr_54 Start: 36889, Stop: 37476, Start Num: 52

Candidate Starts for JasperJr_54:

(26, 36727), (30, 36775), (Start: 52 @36889 has 64 MA's), (72, 37090), (81, 37156), (84, 37186), (86, 37207), (90, 37240), (93, 37258), (102, 37354), (104, 37357), (105, 37363), (106, 37366), (108, 37387), (116, 37456),

Gene: Jecs_64 Start: 41899, Stop: 42630, Start Num: 47

Candidate Starts for Jecs_64:

(Start: 47 @41899 has 11 MA's), (Start: 52 @41917 has 64 MA's), (63, 42031), (72, 42124), (73, 42130), (95, 42304), (109, 42424), (110, 42433), (111, 42436), (119, 42526),

Gene: Kinbote_63 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Kinbote_63:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: LilHazelnut_64 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for LilHazelnut_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: LonelyBoi_53 Start: 40470, Stop: 41057, Start Num: 52

Candidate Starts for LonelyBoi_53:

(51, 40467), (Start: 52 @40470 has 64 MA's), (63, 40578), (72, 40674), (81, 40740), (84, 40770), (86, 40791), (93, 40842), (102, 40938), (104, 40941), (105, 40947), (115, 41037),

Gene: Luke_63 Start: 43917, Stop: 44468, Start Num: 53

Candidate Starts for Luke_63:

(Start: 52 @43914 has 64 MA's), (Start: 53 @43917 has 9 MA's), (56, 43932), (60, 44016), (62, 44028), (63, 44040), (67, 44073), (74, 44142), (75, 44145), (80, 44184), (83, 44211), (85, 44229), (87, 44247), (93, 44292), (94, 44295), (97, 44310), (101, 44355), (110, 44415), (113, 44433),

Gene: Luna22_61 Start: 43946, Stop: 44497, Start Num: 53

Candidate Starts for Luna22_61:

(Start: 52 @43943 has 64 MA's), (Start: 53 @43946 has 9 MA's), (56, 43961), (60, 44045), (62, 44057), (63, 44069), (67, 44102), (74, 44171), (75, 44174), (80, 44213), (83, 44240), (85, 44258), (87, 44276), (93, 44321), (94, 44324), (97, 44339), (101, 44384), (110, 44444), (113, 44462),

Gene: Lysidious_58 Start: 38835, Stop: 39422, Start Num: 52

Candidate Starts for Lysidious_58:

(26, 38673), (30, 38721), (Start: 52 @38835 has 64 MA's), (58, 38892), (72, 39036), (81, 39102), (84, 39132), (93, 39204), (102, 39300), (104, 39303), (105, 39309), (108, 39333), (116, 39402),

Gene: Madavieve_52 Start: 38399, Stop: 38983, Start Num: 52

Candidate Starts for Madavieve_52:

(21, 38195), (46, 38369), (Start: 50 @38393 has 1 MA's), (Start: 52 @38399 has 64 MA's), (72, 38600), (81, 38666), (84, 38696), (86, 38717), (93, 38768), (102, 38864), (104, 38867), (105, 38873), (115, 38963),

Gene: Madeline_55 Start: 39843, Stop: 40427, Start Num: 52

Candidate Starts for Madeline_55:

(46, 39813), (Start: 50 @39837 has 1 MA's), (Start: 52 @39843 has 64 MA's), (72, 40044), (84, 40140), (91, 40203), (100, 40275), (102, 40308), (104, 40311), (108, 40341),

Gene: MagicMan_61 Start: 41953, Stop: 42714, Start Num: 47

Candidate Starts for MagicMan_61:

(Start: 47 @41953 has 11 MA's), (Start: 52 @41971 has 64 MA's), (63, 42085), (72, 42178), (73, 42184), (95, 42358), (109, 42478), (110, 42487), (111, 42490),

Gene: Malibo_57 Start: 39555, Stop: 40142, Start Num: 52

Candidate Starts for Malibo_57:

(30, 39441), (Start: 52 @39555 has 64 MA's), (63, 39663), (72, 39759), (93, 39927), (98, 39963), (99, 39984), (100, 39990), (104, 40026), (105, 40032), (108, 40056),

Gene: Maridalia_58 Start: 39189, Stop: 39773, Start Num: 52

Candidate Starts for Maridalia_58:

(21, 38985), (46, 39159), (Start: 50 @39183 has 1 MA's), (Start: 52 @39189 has 64 MA's), (72, 39390), (81, 39456), (84, 39486), (86, 39507), (93, 39558), (102, 39654), (104, 39657), (105, 39663), (115, 39753),

Gene: Marteena_53 Start: 38610, Stop: 39200, Start Num: 52

Candidate Starts for Marteena_53:

(46, 38580), (Start: 50 @38604 has 1 MA's), (Start: 52 @38610 has 64 MA's), (72, 38814), (84, 38910), (86, 38931), (93, 38982), (102, 39078), (104, 39081), (105, 39087), (106, 39090), (108, 39111), (116, 39180),

Gene: Mellie_55 Start: 36842, Stop: 37432, Start Num: 52

Candidate Starts for Mellie_55:

(26, 36680), (30, 36728), (Start: 52 @36842 has 64 MA's), (72, 37046), (81, 37112), (84, 37142), (86, 37163), (93, 37214), (102, 37310), (104, 37313), (105, 37319), (106, 37322), (108, 37343),

Gene: MintFen_57 Start: 37276, Stop: 37863, Start Num: 52

Candidate Starts for MintFen_57:

(Start: 52 @37276 has 64 MA's), (72, 37477), (84, 37573), (93, 37645), (102, 37741), (104, 37744), (105, 37750), (106, 37753), (108, 37774),

Gene: MissRona_58 Start: 39150, Stop: 39737, Start Num: 52

Candidate Starts for MissRona_58:

(26, 38988), (30, 39036), (Start: 52 @39150 has 64 MA's), (72, 39351), (81, 39417), (84, 39447), (86, 39468), (93, 39519), (102, 39615), (104, 39618), (105, 39624), (106, 39627), (108, 39648),

Gene: NaLuna_62 Start: 40371, Stop: 41081, Start Num: 52

Candidate Starts for NaLuna_62:

(39, 40314), (Start: 47 @40353 has 11 MA's), (Start: 52 @40371 has 64 MA's), (63, 40485), (72, 40578), (73, 40584), (95, 40758), (109, 40878), (110, 40887), (111, 40890),

Gene: NovoPizza_67 Start: 45546, Stop: 46103, Start Num: 53

Candidate Starts for NovoPizza_67:

(27, 45390), (Start: 53 @45546 has 9 MA's), (57, 45582), (58, 45606), (59, 45615), (63, 45669), (64, 45687), (65, 45690), (67, 45702), (69, 45717), (70, 45732), (74, 45771), (80, 45813), (83, 45840), (92, 45918), (93, 45921), (110, 46044), (113, 46062),

Gene: OBUpride_64 Start: 43955, Stop: 44509, Start Num: 52

Candidate Starts for OBUpride_64:

(Start: 52 @43955 has 64 MA's), (Start: 53 @43958 has 9 MA's), (56, 43973), (57, 43994), (60, 44057), (62, 44069), (63, 44081), (67, 44114), (74, 44183), (75, 44186), (80, 44225), (83, 44252), (85, 44270), (93, 44333), (94, 44336), (97, 44351), (101, 44396), (110, 44456), (112, 44468), (113, 44474),

Gene: Opie_64 Start: 42071, Stop: 42832, Start Num: 47

Candidate Starts for Opie_64:

(32, 41987), (39, 42032), (Start: 47 @42071 has 11 MA's), (Start: 52 @42089 has 64 MA's), (63, 42203), (72, 42296), (73, 42302), (95, 42476), (109, 42596), (110, 42605), (111, 42608),

Gene: Oregano_55 Start: 36424, Stop: 37011, Start Num: 52

Candidate Starts for Oregano_55:

(22, 36247), (24, 36268), (Start: 50 @36418 has 1 MA's), (Start: 52 @36424 has 64 MA's), (63, 36532), (72, 36628), (73, 36634), (84, 36724), (100, 36862), (102, 36895), (104, 36898), (105, 36904), (108, 36928),

Gene: PatriciaStar_61 Start: 43170, Stop: 43883, Start Num: 52

Candidate Starts for PatriciaStar_61:

(40, 43113), (41, 43119), (44, 43131), (Start: 47 @43149 has 11 MA's), (Start: 50 @43164 has 1 MA's), (Start: 52 @43170 has 64 MA's), (63, 43284), (73, 43383), (78, 43434), (82, 43449), (93, 43545), (95, 43557), (109, 43677), (110, 43686),

Gene: Petra_53 Start: 35617, Stop: 36207, Start Num: 52

Candidate Starts for Petra_53:

(26, 35455), (30, 35503), (Start: 52 @35617 has 64 MA's), (72, 35821), (81, 35887), (84, 35917), (86, 35938), (88, 35947), (90, 35971), (93, 35989), (102, 36085), (104, 36088), (105, 36094), (106, 36097), (108, 36118),

Gene: PhriskyACE_50 Start: 36416, Stop: 36979, Start Num: 52

Candidate Starts for PhriskyACE_50:

(21, 36212), (23, 36227), (Start: 50 @36410 has 1 MA's), (Start: 52 @36416 has 64 MA's), (63, 36524), (71, 36608), (72, 36620), (73, 36626), (84, 36716), (96, 36803), (100, 36830), (102, 36863), (104, 36866), (105, 36872), (108, 36896),

Gene: Pipp_59 Start: 37969, Stop: 38559, Start Num: 52

Candidate Starts for Pipp_59:

(26, 37807), (30, 37855), (Start: 52 @37969 has 64 MA's), (72, 38173), (84, 38269), (86, 38290), (90, 38323), (93, 38341), (102, 38437), (104, 38440), (105, 38446), (106, 38449), (108, 38470),

Gene: Pollux_57 Start: 40516, Stop: 41088, Start Num: 52

Candidate Starts for Pollux_57:

(46, 40486), (Start: 50 @40510 has 1 MA's), (Start: 52 @40516 has 64 MA's), (63, 40624), (72, 40720),

Gene: Powerball_52 Start: 36542, Stop: 37105, Start Num: 52

Candidate Starts for Powerball_52:

(21, 36338), (23, 36353), (Start: 50 @36536 has 1 MA's), (Start: 52 @36542 has 64 MA's), (63, 36650), (71, 36734), (72, 36746), (73, 36752), (84, 36842), (96, 36929), (100, 36956), (102, 36989), (104, 36992), (105, 36998), (108, 37022),

Gene: Rem711_52 Start: 36120, Stop: 36674, Start Num: 55

Candidate Starts for Rem711_52:

(43, 36066), (49, 36102), (51, 36108), (Start: 55 @36120 has 1 MA's), (66, 36267), (79, 36393), (83, 36423), (89, 36462), (109, 36615), (110, 36624),

Gene: Samba_56 Start: 39498, Stop: 40085, Start Num: 52

Candidate Starts for Samba_56:

(Start: 52 @39498 has 64 MA's), (72, 39699), (84, 39795), (93, 39867), (102, 39963), (104, 39966), (105, 39972), (106, 39975), (108, 39996),

Gene: Schnabeltier_62 Start: 41372, Stop: 42097, Start Num: 47

Candidate Starts for Schnabeltier_62:

(Start: 47 @41372 has 11 MA's), (Start: 52 @41390 has 64 MA's), (72, 41597), (78, 41654), (82, 41669), (89, 41726), (95, 41777), (109, 41897), (110, 41906), (111, 41909),

Gene: ShawBrad_99 Start: 50885, Stop: 51478, Start Num: 52

Candidate Starts for ShawBrad_99:

(1, 50216), (2, 50306), (4, 50372), (8, 50474), (12, 50525), (14, 50567), (18, 50621), (20, 50627), (33, 50783), (34, 50789), (36, 50798), (38, 50813), (45, 50855), (Start: 52 @50885 has 64 MA's), (59, 50951), (76, 51107), (84, 51173), (100, 51287), (106, 51335), (109, 51377), (117, 51449), (118, 51473),

Gene: Sidious_54 Start: 38723, Stop: 39313, Start Num: 52

Candidate Starts for Sidious_54:

(21, 38519), (31, 38621), (Start: 50 @38717 has 1 MA's), (Start: 52 @38723 has 64 MA's), (72, 38927), (73, 38933), (84, 39023), (86, 39044), (93, 39095), (102, 39191), (104, 39194), (105, 39200), (108, 39224),

Gene: Sidious_59 Start: 42258, Stop: 42845, Start Num: 52

Candidate Starts for Sidious_59:

(11, 41895), (15, 41973), (19, 42003), (25, 42066), (Start: 52 @42258 has 64 MA's), (72, 42468), (82, 42540), (84, 42564), (93, 42636), (102, 42711), (103, 42714), (105, 42720), (109, 42765), (110, 42774),

Gene: Sparky_80 Start: 54416, Stop: 54964, Start Num: 54

Candidate Starts for Sparky_80:

(37, 54326), (43, 54365), (Start: 54 @54416 has 2 MA's), (77, 54650), (93, 54785), (109, 54902), (110, 54911), (112, 54923),

Gene: Spooky_97 Start: 52512, Stop: 53075, Start Num: 52

Candidate Starts for Spooky_97:

(16, 52416), (Start: 52 @52512 has 64 MA's), (61, 52608), (72, 52719), (76, 52743), (84, 52809), (100, 52923), (106, 52971), (109, 53013),

Gene: Sprinklemunch_61 Start: 41882, Stop: 42448, Start Num: 52

Candidate Starts for Sprinklemunch_61:

(46, 41852), (Start: 50 @41876 has 1 MA's), (Start: 52 @41882 has 64 MA's), (63, 41990), (93, 42251), (102, 42326), (104, 42329), (105, 42335),

Gene: SushiChef_54 Start: 39957, Stop: 40541, Start Num: 52

Candidate Starts for SushiChef_54:

(21, 39753), (46, 39927), (Start: 50 @39951 has 1 MA's), (Start: 52 @39957 has 64 MA's), (72, 40158), (81, 40224), (84, 40254), (86, 40275), (93, 40326), (102, 40422), (104, 40425), (105, 40431), (115, 40521),

Gene: TaronosaurusRx_65 Start: 41369, Stop: 42100, Start Num: 47

Candidate Starts for TaronosaurusRx_65:

(Start: 47 @41369 has 11 MA's), (Start: 52 @41387 has 64 MA's), (63, 41501), (72, 41594), (78, 41651), (82, 41666), (95, 41774), (109, 41894), (110, 41903), (111, 41906), (119, 41996),

Gene: ThankyouJordi_62 Start: 43975, Stop: 44550, Start Num: 52

Candidate Starts for ThankyouJordi_62:

(Start: 52 @43975 has 64 MA's), (63, 44089), (72, 44182), (82, 44254), (84, 44278), (88, 44308), (93, 44350), (102, 44425), (104, 44431), (109, 44482),

Gene: Tuti_50 Start: 37172, Stop: 37759, Start Num: 52

Candidate Starts for Tuti_50:

(22, 36995), (24, 37016), (Start: 50 @37166 has 1 MA's), (Start: 52 @37172 has 64 MA's), (63, 37280), (72, 37376), (73, 37382), (84, 37472), (100, 37610), (102, 37643), (104, 37646), (105, 37652), (108, 37676),

Gene: Ubuntu_64 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for Ubuntu_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Walrus_55 Start: 36777, Stop: 37367, Start Num: 52

Candidate Starts for Walrus_55:

(26, 36615), (30, 36663), (Start: 52 @36777 has 64 MA's), (72, 36981), (84, 37077), (86, 37098), (90, 37131), (93, 37149), (102, 37245), (104, 37248), (105, 37254), (106, 37257), (108, 37278),

Gene: Webster2_64 Start: 43959, Stop: 44513, Start Num: 52

Candidate Starts for Webster2_64:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: WelcomeAyanna_62 Start: 44122, Stop: 44697, Start Num: 52

Candidate Starts for WelcomeAyanna_62:

(Start: 52 @44122 has 64 MA's), (63, 44236), (72, 44329), (82, 44401), (84, 44425), (88, 44455), (93, 44497), (102, 44572), (104, 44578), (109, 44629),

Gene: Wishmaker_61 Start: 43962, Stop: 44513, Start Num: 53

Candidate Starts for Wishmaker_61:

(Start: 52 @43959 has 64 MA's), (Start: 53 @43962 has 9 MA's), (56, 43977), (60, 44061), (62, 44073), (63, 44085), (67, 44118), (74, 44187), (75, 44190), (80, 44229), (83, 44256), (85, 44274), (87, 44292), (93, 44337), (94, 44340), (97, 44355), (101, 44400), (110, 44460), (113, 44478),

Gene: Wocket_57 Start: 37262, Stop: 37849, Start Num: 52

Candidate Starts for Wocket_57:

(3, 36689), (5, 36764), (26, 37100), (30, 37148), (37, 37181), (Start: 52 @37262 has 64 MA's), (72, 37463), (81, 37529), (84, 37559), (93, 37631), (102, 37727), (104, 37730), (105, 37736), (108, 37760),

Gene: ZAYM_64 Start: 41414, Stop: 42145, Start Num: 47

Candidate Starts for ZAYM_64:

(Start: 47 @41414 has 11 MA's), (Start: 52 @41432 has 64 MA's), (63, 41546), (72, 41639), (78, 41696), (82, 41711), (95, 41819), (109, 41939), (110, 41948), (111, 41951),

Gene: Zarbodnamra_56 Start: 36684, Stop: 37271, Start Num: 52

Candidate Starts for Zarbodnamra_56:

(Start: 52 @36684 has 64 MA's), (72, 36885), (84, 36981), (93, 37053), (102, 37149), (104, 37152), (105, 37158), (108, 37182),

Gene: Zilla_55 Start: 36440, Stop: 37027, Start Num: 52

Candidate Starts for Zilla_55:

(Start: 52 @36440 has 64 MA's), (72, 36641), (84, 36737), (93, 36809), (102, 36905), (104, 36908), (105, 36914), (106, 36917), (108, 36938),