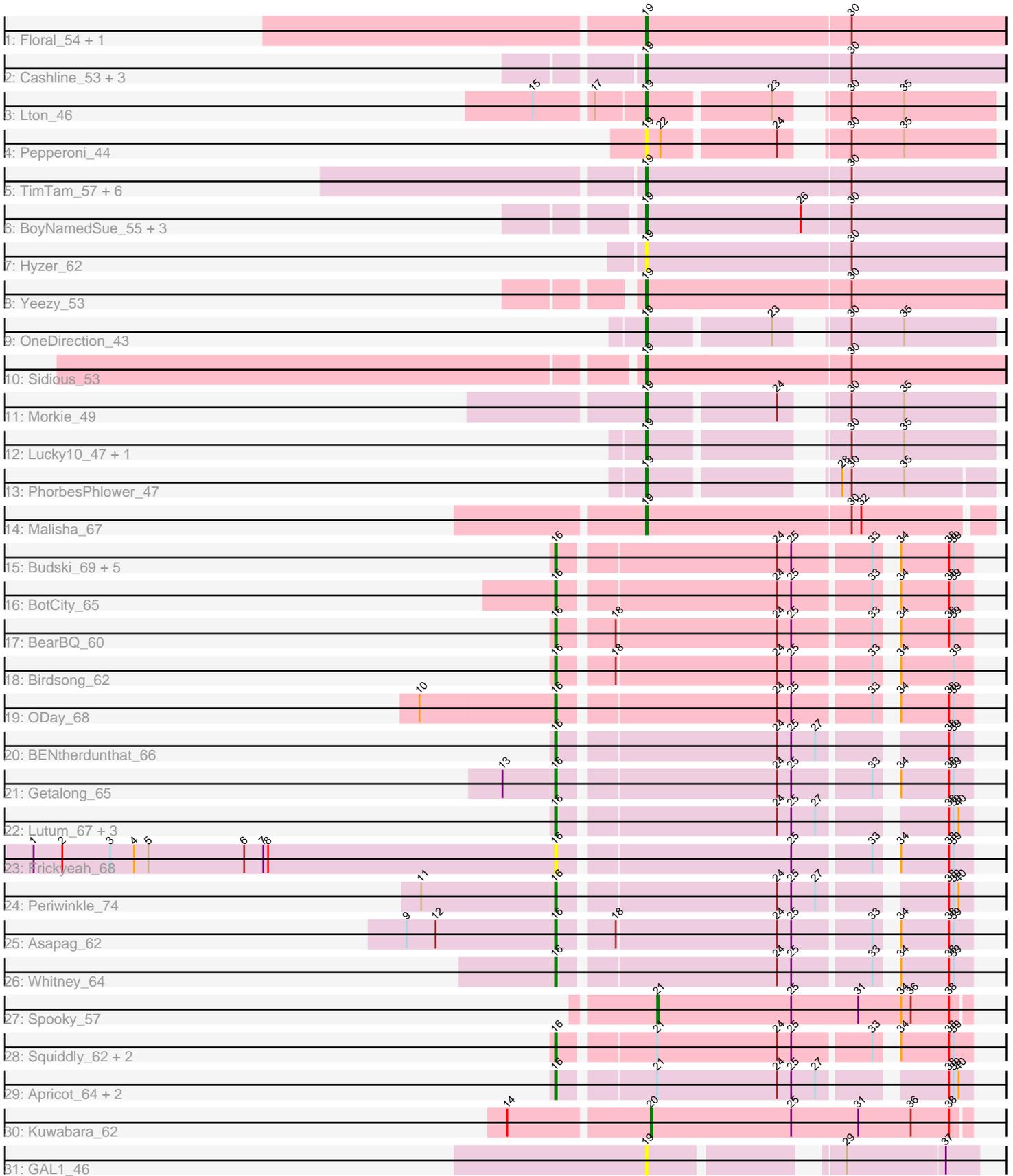


Pham 291202



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 291202 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291202 has 57 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Floral_54, Pollux_56
- Track 2 : Cashline_53, Ohgeesy_54, BaxterFox_57, Ebert_54
- Track 3 : Lton_46
- Track 4 : Pepperoni_44
- Track 5 : TimTam_57, Herod_55, Eviarto_57, Hugley_53, BatStarr_56, PantheRoc_57, Nymphadora_57
- Track 6 : BoyNamedSue_55, Marteena_52, EMSquaredA_53, AlumE_55
- Track 7 : Hyzer_62
- Track 8 : Yeezy_53
- Track 9 : OneDirection_43
- Track 10 : Sidious_53
- Track 11 : Morkie_49
- Track 12 : Lucky10_47, Faith5x5_42
- Track 13 : PhorbPhlower_47
- Track 14 : Malisha_67
- Track 15 : Budski_69, Horus_63, Phistory_63, MortyNRick_58, Phabuloso_64, Holliday_66
- Track 16 : BotCity_65
- Track 17 : BearBQ_60
- Track 18 : Birdsong_62
- Track 19 : ODay_68
- Track 20 : BENtherdunthat_66
- Track 21 : Getalong_65
- Track 22 : Lutum_67, Ecliptus_65, Kenna_62, ShawBrad_69
- Track 23 : Frickyeah_68
- Track 24 : Periwinkle_74
- Track 25 : Asapag_62
- Track 26 : Whitney_64
- Track 27 : Spooky_57
- Track 28 : Squiddly_62, LitninMcQueen_60, Kamaru_61
- Track 29 : Apricot_64, Crater_64, Leroy_64
- Track 30 : Kuwabara_62
- Track 31 : GAL1_46

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

The start number called the most often in the published annotations is 19, it was called in 25 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlumE_55, BatStarr_56, BaxterFox_57, BoyNamedSue_55, Cashline_53, EMSquaredA_53, Ebert_54, Eviarto_57, Faith5x5_42, Floral_54, GAL1_46, Herod_55, Hugley_53, Hyzer_62, Lton_46, Lucky10_47, Malisha_67, Marteena_52, Morkie_49, Nymphadora_57, Ohgeesy_54, OneDirection_43, PantheRoc_57, Pepperoni_44, PhorbesPhlower_47, Pollux_56, Sidious_53, TimTam_57, Yeezy_53,

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

-

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

- Apricot_64, Asapag_62, BENtherdunthat_66, BearBQ_60, Birdsong_62, BotCity_65, Budski_69, Crater_64, Ecliptus_65, Frickyeh_68, Getalong_65, Holliday_66, Horus_63, Kamaru_61, Kenna_62, Kuwabara_62, Leroy_64, LitninMcQueen_60, Lutum_67, MortyNRick_58, ODay_68, Periwinkle_74, Phabuloso_64, Phistory_63, ShawBrad_69, Spooky_57, Squiddly_62, Whitney_64,

Summary by start number:

Start 16:

- Found in 26 of 57 (45.6%) of genes in pham
- Manual Annotations of this start: 24 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_64 (DN3), Asapag_62 (DN1), BENtherdunthat_66 (DN1), BearBQ_60 (DN), Birdsong_62 (DN), BotCity_65 (DN), Budski_69 (DN), Crater_64 (DN3), Ecliptus_65 (DN), Frickyeh_68 (DN1), Getalong_65 (DN1), Holliday_66 (DN1), Horus_63 (DN1), Kamaru_61 (DN1), Kenna_62 (DN1), Leroy_64 (DN1), LitninMcQueen_60 (DN1), Lutum_67 (DN1), MortyNRick_58 (DN), ODay_68 (DN), Periwinkle_74 (DN1), Phabuloso_64 (DN1), Phistory_63 (DN1), ShawBrad_69 (DN1), Squiddly_62 (DN2), Whitney_64 (DN1),

Start 19:

- Found in 29 of 57 (50.9%) of genes in pham
- Manual Annotations of this start: 25 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlumE_55 (CZ1), BatStarr_56 (CZ1), BaxterFox_57 (CZ3), BoyNamedSue_55 (CZ1), Cashline_53 (CY6), EMSquaredA_53 (CY1), Ebert_54 (CZ2), Eviarto_57 (CZ1), Faith5x5_42 (CZ6), Floral_54 (CY1), GAL1_46 (singleton), Herod_55 (CZ1), Hugley_53 (CZ1), Hyzer_62 (CZ1), Lton_46 (CZ), Lucky10_47 (DH), Malisha_67 (DN), Marteena_52 (CY1), Morkie_49 (DH), Nymphadora_57 (CZ1), Ohgeesy_54 (CZ), OneDirection_43 (CZ6), PantheRoc_57 (CZ3), Pepperoni_44 (CZ), PhorbesPhlower_47 (DH), Pollux_56 (CY1), Sidious_53 (CZ7), TimTam_57 (CZ1), Yeezy_53 (CZ3),

Start 20:

- Found in 1 of 57 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara_62 (DN4),

Start 21:

- Found in 7 of 57 (12.3%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Spooky_57 (DN2),

Summary by clusters:

There are 15 clusters represented in this pham: DN, CY1, CY6, DH, CZ, CZ2, CZ3, CZ1, CZ6, CZ7, DN4, DN1, DN3, DN2, singleton,

Info for manual annotations of cluster CY1:

- Start number 19 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY6:

- Start number 19 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CZ:

- Start number 19 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 19 was manually annotated 7 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 19 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 19 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ6:

- Start number 19 was manually annotated 2 times for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 19 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DH:

- Start number 19 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 16 was manually annotated 7 times for cluster DN.
- Start number 19 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 16 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 16 was manually annotated 1 time for cluster DN2.
- Start number 21 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 16 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

•Start number 20 was manually annotated 1 time for cluster DN4.

Gene Information:

Gene: AlumE_55 Start: 39196, Stop: 39438, Start Num: 19

Candidate Starts for AlumE_55:

(Start: 19 @39196 has 25 MA's), (26, 39292), (30, 39322),

Gene: Apricot_64 Start: 39325, Stop: 39558, Start Num: 16

Candidate Starts for Apricot_64:

(Start: 16 @39325 has 24 MA's), (Start: 21 @39379 has 1 MA's), (24, 39454), (25, 39463), (27, 39478), (38, 39544), (39, 39547), (40, 39550),

Gene: Asapag_62 Start: 38801, Stop: 39034, Start Num: 16

Candidate Starts for Asapag_62:

(9, 38708), (12, 38726), (Start: 16 @38801 has 24 MA's), (18, 38831), (24, 38930), (25, 38939), (33, 38984), (34, 38990), (38, 39020), (39, 39023),

Gene: BENtherdunthat_66 Start: 40285, Stop: 40518, Start Num: 16

Candidate Starts for BENtherdunthat_66:

(Start: 16 @40285 has 24 MA's), (24, 40414), (25, 40423), (27, 40438), (38, 40504), (39, 40507),

Gene: BatStarr_56 Start: 40720, Stop: 40962, Start Num: 19

Candidate Starts for BatStarr_56:

(Start: 19 @40720 has 25 MA's), (30, 40846),

Gene: BaxterFox_57 Start: 40474, Stop: 40716, Start Num: 19

Candidate Starts for BaxterFox_57:

(Start: 19 @40474 has 25 MA's), (30, 40600),

Gene: BearBQ_60 Start: 40529, Stop: 40762, Start Num: 16

Candidate Starts for BearBQ_60:

(Start: 16 @40529 has 24 MA's), (18, 40559), (24, 40658), (25, 40667), (33, 40712), (34, 40718), (38, 40748), (39, 40751),

Gene: Birdsong_62 Start: 39196, Stop: 39429, Start Num: 16

Candidate Starts for Birdsong_62:

(Start: 16 @39196 has 24 MA's), (18, 39226), (24, 39325), (25, 39334), (33, 39379), (34, 39385), (39, 39418),

Gene: BotCity_65 Start: 40477, Stop: 40710, Start Num: 16

Candidate Starts for BotCity_65:

(Start: 16 @40477 has 24 MA's), (24, 40606), (25, 40615), (33, 40660), (34, 40666), (38, 40696), (39, 40699),

Gene: BoyNamedSue_55 Start: 39196, Stop: 39438, Start Num: 19

Candidate Starts for BoyNamedSue_55:

(Start: 19 @39196 has 25 MA's), (26, 39292), (30, 39322),

Gene: Budski_69 Start: 41317, Stop: 41550, Start Num: 16

Candidate Starts for Budski_69:

(Start: 16 @41317 has 24 MA's), (24, 41446), (25, 41455), (33, 41500), (34, 41506), (38, 41536), (39, 41539),

Gene: Cashline_53 Start: 39714, Stop: 39956, Start Num: 19

Candidate Starts for Cashline_53:

(Start: 19 @39714 has 25 MA's), (30, 39840),

Gene: Crater_64 Start: 39720, Stop: 39953, Start Num: 16

Candidate Starts for Crater_64:

(Start: 16 @39720 has 24 MA's), (Start: 21 @39774 has 1 MA's), (24, 39849), (25, 39858), (27, 39873), (38, 39939), (39, 39942), (40, 39945),

Gene: EMSquaredA_53 Start: 38371, Stop: 38613, Start Num: 19

Candidate Starts for EMSquaredA_53:

(Start: 19 @38371 has 25 MA's), (26, 38467), (30, 38497),

Gene: Ebert_54 Start: 34571, Stop: 34813, Start Num: 19

Candidate Starts for Ebert_54:

(Start: 19 @34571 has 25 MA's), (30, 34697),

Gene: Ecliptus_65 Start: 41517, Stop: 41750, Start Num: 16

Candidate Starts for Ecliptus_65:

(Start: 16 @41517 has 24 MA's), (24, 41646), (25, 41655), (27, 41670), (38, 41736), (39, 41739), (40, 41742),

Gene: Eviarto_57 Start: 40695, Stop: 40937, Start Num: 19

Candidate Starts for Eviarto_57:

(Start: 19 @40695 has 25 MA's), (30, 40821),

Gene: Faith5x5_42 Start: 30278, Stop: 30463, Start Num: 19

Candidate Starts for Faith5x5_42:

(Start: 19 @30278 has 25 MA's), (30, 30377), (35, 30410),

Gene: Floral_54 Start: 40277, Stop: 40519, Start Num: 19

Candidate Starts for Floral_54:

(Start: 19 @40277 has 25 MA's), (30, 40403),

Gene: Frickyeah_68 Start: 39812, Stop: 40045, Start Num: 16

Candidate Starts for Frickyeah_68:

(1, 39485), (2, 39503), (3, 39533), (4, 39548), (5, 39557), (6, 39617), (7, 39629), (8, 39632), (Start: 16 @39812 has 24 MA's), (25, 39950), (33, 39995), (34, 40001), (38, 40031), (39, 40034),

Gene: GAL1_46 Start: 34604, Stop: 34783, Start Num: 19

Candidate Starts for GAL1_46:

(Start: 19 @34604 has 25 MA's), (29, 34703), (37, 34763),

Gene: Getalong_65 Start: 41179, Stop: 41412, Start Num: 16

Candidate Starts for Getalong_65:

(13, 41146), (Start: 16 @41179 has 24 MA's), (24, 41308), (25, 41317), (33, 41362), (34, 41368), (38, 41398), (39, 41401),

Gene: Herod_55 Start: 40739, Stop: 40981, Start Num: 19

Candidate Starts for Herod_55:
(Start: 19 @40739 has 25 MA's), (30, 40865),

Gene: Holliday_66 Start: 41153, Stop: 41386, Start Num: 16
Candidate Starts for Holliday_66:
(Start: 16 @41153 has 24 MA's), (24, 41282), (25, 41291), (33, 41336), (34, 41342), (38, 41372), (39, 41375),

Gene: Horus_63 Start: 40387, Stop: 40620, Start Num: 16
Candidate Starts for Horus_63:
(Start: 16 @40387 has 24 MA's), (24, 40516), (25, 40525), (33, 40570), (34, 40576), (38, 40606), (39, 40609),

Gene: Hugley_53 Start: 40719, Stop: 40961, Start Num: 19
Candidate Starts for Hugley_53:
(Start: 19 @40719 has 25 MA's), (30, 40845),

Gene: Hyzer_62 Start: 42111, Stop: 42353, Start Num: 19
Candidate Starts for Hyzer_62:
(Start: 19 @42111 has 25 MA's), (30, 42237),

Gene: Kamaru_61 Start: 39381, Stop: 39614, Start Num: 16
Candidate Starts for Kamaru_61:
(Start: 16 @39381 has 24 MA's), (Start: 21 @39435 has 1 MA's), (24, 39510), (25, 39519), (33, 39564), (34, 39570), (38, 39600), (39, 39603),

Gene: Kenna_62 Start: 39350, Stop: 39583, Start Num: 16
Candidate Starts for Kenna_62:
(Start: 16 @39350 has 24 MA's), (24, 39479), (25, 39488), (27, 39503), (38, 39569), (39, 39572), (40, 39575),

Gene: Kuwabara_62 Start: 40677, Stop: 40874, Start Num: 20
Candidate Starts for Kuwabara_62:
(14, 40593), (Start: 20 @40677 has 1 MA's), (25, 40764), (31, 40806), (36, 40839), (38, 40863),

Gene: Leroy_64 Start: 39656, Stop: 39889, Start Num: 16
Candidate Starts for Leroy_64:
(Start: 16 @39656 has 24 MA's), (Start: 21 @39710 has 1 MA's), (24, 39785), (25, 39794), (27, 39809), (38, 39875), (39, 39878), (40, 39881),

Gene: LitninMcQueen_60 Start: 39128, Stop: 39361, Start Num: 16
Candidate Starts for LitninMcQueen_60:
(Start: 16 @39128 has 24 MA's), (Start: 21 @39182 has 1 MA's), (24, 39257), (25, 39266), (33, 39311), (34, 39317), (38, 39347), (39, 39350),

Gene: Lton_46 Start: 30324, Stop: 30512, Start Num: 19
Candidate Starts for Lton_46:
(15, 30261), (17, 30294), (Start: 19 @30324 has 25 MA's), (23, 30396), (30, 30423), (35, 30456),

Gene: Lucky10_47 Start: 33042, Stop: 33230, Start Num: 19
Candidate Starts for Lucky10_47:
(Start: 19 @33042 has 25 MA's), (30, 33141), (35, 33174),

Gene: Lutum_67 Start: 40514, Stop: 40747, Start Num: 16
Candidate Starts for Lutum_67:
(Start: 16 @40514 has 24 MA's), (24, 40643), (25, 40652), (27, 40667), (38, 40733), (39, 40736), (40, 40739),

Gene: Malisha_67 Start: 41399, Stop: 41608, Start Num: 19
Candidate Starts for Malisha_67:
(Start: 19 @41399 has 25 MA's), (30, 41525), (32, 41531),

Gene: Marteena_52 Start: 38371, Stop: 38613, Start Num: 19
Candidate Starts for Marteena_52:
(Start: 19 @38371 has 25 MA's), (26, 38467), (30, 38497),

Gene: Morkie_49 Start: 32379, Stop: 32567, Start Num: 19
Candidate Starts for Morkie_49:
(Start: 19 @32379 has 25 MA's), (24, 32454), (30, 32478), (35, 32511),

Gene: MortyNRick_58 Start: 40558, Stop: 40791, Start Num: 16
Candidate Starts for MortyNRick_58:
(Start: 16 @40558 has 24 MA's), (24, 40687), (25, 40696), (33, 40741), (34, 40747), (38, 40777), (39, 40780),

Gene: Nymphadora_57 Start: 40719, Stop: 40961, Start Num: 19
Candidate Starts for Nymphadora_57:
(Start: 19 @40719 has 25 MA's), (30, 40845),

Gene: ODay_68 Start: 41458, Stop: 41691, Start Num: 16
Candidate Starts for ODay_68:
(10, 41374), (Start: 16 @41458 has 24 MA's), (24, 41587), (25, 41596), (33, 41641), (34, 41647), (38, 41677), (39, 41680),

Gene: Ohgeesy_54 Start: 38818, Stop: 39060, Start Num: 19
Candidate Starts for Ohgeesy_54:
(Start: 19 @38818 has 25 MA's), (30, 38944),

Gene: OneDirection_43 Start: 29772, Stop: 29960, Start Num: 19
Candidate Starts for OneDirection_43:
(Start: 19 @29772 has 25 MA's), (23, 29844), (30, 29871), (35, 29904),

Gene: PantheRoc_57 Start: 39540, Stop: 39782, Start Num: 19
Candidate Starts for PantheRoc_57:
(Start: 19 @39540 has 25 MA's), (30, 39666),

Gene: Pepperoni_44 Start: 31534, Stop: 31722, Start Num: 19
Candidate Starts for Pepperoni_44:
(Start: 19 @31534 has 25 MA's), (22, 31543), (24, 31609), (30, 31633), (35, 31666),

Gene: Periwinkle_74 Start: 42820, Stop: 43053, Start Num: 16
Candidate Starts for Periwinkle_74:
(11, 42736), (Start: 16 @42820 has 24 MA's), (24, 42949), (25, 42958), (27, 42973), (38, 43039), (39, 43042), (40, 43045),

Gene: Phabuloso_64 Start: 39559, Stop: 39792, Start Num: 16

Candidate Starts for Phabuloso_64:

(Start: 16 @39559 has 24 MA's), (24, 39688), (25, 39697), (33, 39742), (34, 39748), (38, 39778), (39, 39781),

Gene: Phistory_63 Start: 38885, Stop: 39118, Start Num: 16

Candidate Starts for Phistory_63:

(Start: 16 @38885 has 24 MA's), (24, 39014), (25, 39023), (33, 39068), (34, 39074), (38, 39104), (39, 39107),

Gene: PhorbesPhlower_47 Start: 31528, Stop: 31713, Start Num: 19

Candidate Starts for PhorbesPhlower_47:

(Start: 19 @31528 has 25 MA's), (28, 31621), (30, 31627), (35, 31660),

Gene: Pollux_56 Start: 40277, Stop: 40519, Start Num: 19

Candidate Starts for Pollux_56:

(Start: 19 @40277 has 25 MA's), (30, 40403),

Gene: ShawBrad_69 Start: 39976, Stop: 40209, Start Num: 16

Candidate Starts for ShawBrad_69:

(Start: 16 @39976 has 24 MA's), (24, 40105), (25, 40114), (27, 40129), (38, 40195), (39, 40198), (40, 40201),

Gene: Sidious_53 Start: 38484, Stop: 38726, Start Num: 19

Candidate Starts for Sidious_53:

(Start: 19 @38484 has 25 MA's), (30, 38610),

Gene: Spooky_57 Start: 38296, Stop: 38490, Start Num: 21

Candidate Starts for Spooky_57:

(Start: 21 @38296 has 1 MA's), (25, 38380), (31, 38422), (34, 38449), (36, 38455), (38, 38479),

Gene: Squiddly_62 Start: 40715, Stop: 40948, Start Num: 16

Candidate Starts for Squiddly_62:

(Start: 16 @40715 has 24 MA's), (Start: 21 @40769 has 1 MA's), (24, 40844), (25, 40853), (33, 40898), (34, 40904), (38, 40934), (39, 40937),

Gene: TimTam_57 Start: 40719, Stop: 40961, Start Num: 19

Candidate Starts for TimTam_57:

(Start: 19 @40719 has 25 MA's), (30, 40845),

Gene: Whitney_64 Start: 41230, Stop: 41463, Start Num: 16

Candidate Starts for Whitney_64:

(Start: 16 @41230 has 24 MA's), (24, 41359), (25, 41368), (33, 41413), (34, 41419), (38, 41449), (39, 41452),

Gene: Yeezy_53 Start: 37368, Stop: 37610, Start Num: 19

Candidate Starts for Yeezy_53:

(Start: 19 @37368 has 25 MA's), (30, 37494),