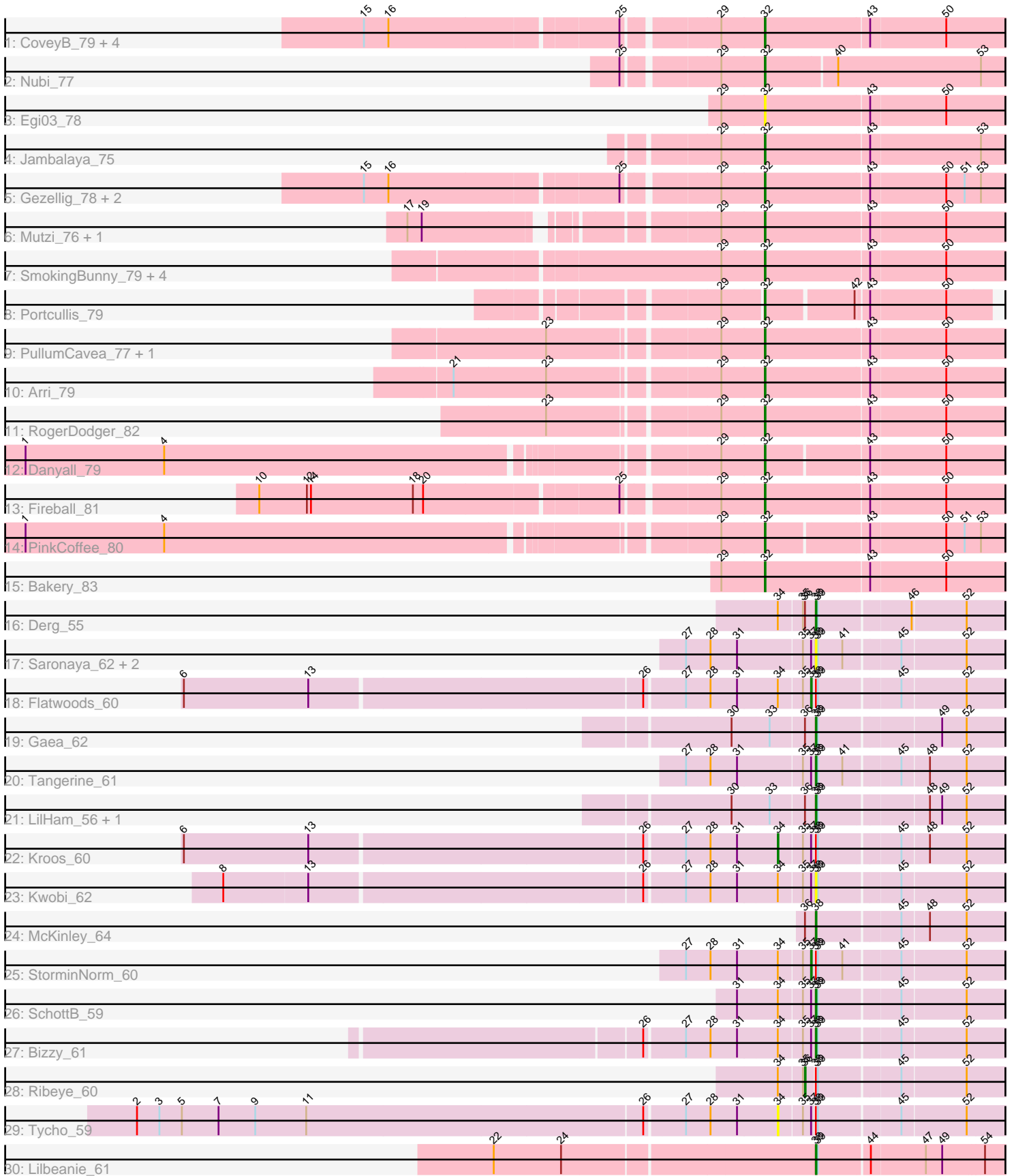


Pham 214398



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 214398 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214398 has 45 members, 10 are drafts.

Phages represented in each track:

- Track 1 : CoveyB\_79, CherryCola\_79, Savbucketdawg\_74, Halo3\_76, Wizard\_75
- Track 2 : Nubi\_77
- Track 3 : Egi03\_78
- Track 4 : Jambalaya\_75
- Track 5 : Gezellig\_78, Valary\_79, KimmyK\_78
- Track 6 : Mutzi\_76, YungMoney\_77
- Track 7 : SmokingBunny\_79, Evamon\_78, Salvador\_78, Togo\_78, Twister6\_79
- Track 8 : Portcullis\_79
- Track 9 : PullumCavea\_77, Phlop\_76
- Track 10 : Arri\_79
- Track 11 : RogerDodger\_82
- Track 12 : Danyall\_79
- Track 13 : Fireball\_81
- Track 14 : PinkCoffee\_80
- Track 15 : Bakery\_83
- Track 16 : Derg\_55
- Track 17 : Saronaya\_62, Gustavo\_62, Baumdotcom\_58
- Track 18 : Flatwoods\_60
- Track 19 : Gaea\_62
- Track 20 : Tangerine\_61
- Track 21 : LilHam\_56, Ashertheman\_62
- Track 22 : Kroos\_60
- Track 23 : Kwobi\_62
- Track 24 : McKinley\_64
- Track 25 : StorminNorm\_60
- Track 26 : SchottB\_59
- Track 27 : Bizzy\_61
- Track 28 : Ribeye\_60
- Track 29 : Tycho\_59
- Track 30 : Lilbeanie\_61

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

The start number called the most often in the published annotations is 32, it was called in 23 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_79, Bakery\_83, CherryCola\_79, CoveyB\_79, Danyall\_79, Egi03\_78, Evamon\_78, Fireball\_81, Gezellig\_78, Halo3\_76, Jambalaya\_75, KimmyK\_78, Mutzi\_76, Nubi\_77, Phlop\_76, PinkCoffee\_80, Portcullis\_79, PullumCavea\_77, RogerDodger\_82, Salvador\_78, Savbucketdawg\_74, SmokingBunny\_79, Togo\_78, Twister6\_79, Valary\_79, Wizard\_75, YungMoney\_77,

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

- 

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

- Ashertheman\_62, Baumdotcom\_58, Bizzy\_61, Derg\_55, Flatwoods\_60, Gaea\_62, Gustavo\_62, Kroos\_60, Kwobi\_62, LilHam\_56, Lilbeanie\_61, McKinley\_64, Ribeye\_60, Saronaya\_62, SchottB\_59, StorminNorm\_60, Tangerine\_61, Tycho\_59,

### Summary by start number:

Start 32:

- Found in 27 of 45 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 23 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri\_79 (DC1), Bakery\_83 (DC1), CherryCola\_79 (DC1), CoveyB\_79 (DC1), Danyall\_79 (DC1), Egi03\_78 (DC1), Evamon\_78 (DC1), Fireball\_81 (DC1), Gezellig\_78 (DC1), Halo3\_76 (DC1), Jambalaya\_75 (DC1), KimmyK\_78 (DC1), Mutzi\_76 (DC1), Nubi\_77 (DC1), Phlop\_76 (DC1), PinkCoffee\_80 (DC1), Portcullis\_79 (DC1), PullumCavea\_77 (DC1), RogerDodger\_82 (DC1), Salvador\_78 (DC1), Savbucketdawg\_74 (DC1), SmokingBunny\_79 (DC1), Togo\_78 (DC1), Twister6\_79 (DC1), Valary\_79 (DC1), Wizard\_75 (DC1), YungMoney\_77 (DC1),

Start 34:

- Found in 9 of 45 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Kroos\_60 (DE1), Tycho\_59 (DE1),

Start 36:

- Found in 6 of 45 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Ribeye\_60 (DE1),

Start 37:

- Found in 11 of 45 ( 24.4% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Flatwoods\_60 (DE1), StorminNorm\_60 (DE1),

Start 38:

- Found in 18 of 45 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 8 of 35
- Called 72.2% of time when present
- Phage (with cluster) where this start called: Ashertheman\_62 (DE1), Baumdotcom\_58 (DE1), Bizzy\_61 (DE1), Derg\_55 (DE1), Gaea\_62 (DE1), Gustavo\_62 (DE1), Kwobi\_62 (DE1), LilHam\_56 (DE1), Lilbeanie\_61 (DE5), McKinley\_64 (DE1), Saronaya\_62 (DE1), SchottB\_59 (DE1), Tangerine\_61 (DE1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: DE1, DE5, DC1,

Info for manual annotations of cluster DC1:

- Start number 32 was manually annotated 23 times for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 34 was manually annotated 1 time for cluster DE1.
- Start number 36 was manually annotated 1 time for cluster DE1.
- Start number 37 was manually annotated 2 times for cluster DE1.
- Start number 38 was manually annotated 7 times for cluster DE1.

Info for manual annotations of cluster DE5:

- Start number 38 was manually annotated 1 time for cluster DE5.

### **Gene Information:**

Gene: Arri\_79 Start: 52547, Stop: 52924, Start Num: 32

Candidate Starts for Arri\_79:

(21, 52118), (23, 52253), (29, 52484), (Start: 32 @52547 has 23 MA's), (43, 52697), (50, 52805),

Gene: Ashertheman\_62 Start: 48524, Stop: 48796, Start Num: 38

Candidate Starts for Ashertheman\_62:

(30, 48410), (33, 48464), (Start: 36 @48512 has 1 MA's), (Start: 38 @48524 has 8 MA's), (39, 48527), (48, 48674), (49, 48692), (52, 48728),

Gene: Bakery\_83 Start: 54647, Stop: 55024, Start Num: 32

Candidate Starts for Bakery\_83:

(29, 54584), (Start: 32 @54647 has 23 MA's), (43, 54797), (50, 54905),

Gene: Baumdotcom\_58 Start: 48035, Stop: 48307, Start Num: 38

Candidate Starts for Baumdotcom\_58:

(27, 47855), (28, 47891), (31, 47930), (35, 48020), (Start: 37 @48032 has 2 MA's), (Start: 38 @48035 has 8 MA's), (39, 48038), (41, 48074), (45, 48149), (52, 48239),

Gene: Bizzy\_61 Start: 48138, Stop: 48410, Start Num: 38

Candidate Starts for Bizzy\_61:

(26, 47904), (27, 47958), (28, 47994), (31, 48033), (Start: 34 @48090 has 1 MA's), (35, 48123), (Start: 37 @48135 has 2 MA's), (Start: 38 @48138 has 8 MA's), (39, 48141), (45, 48252), (52, 48342),

Gene: CherryCola\_79 Start: 52895, Stop: 53272, Start Num: 32

Candidate Starts for CherryCola\_79:

(15, 52352), (16, 52388), (25, 52709), (29, 52832), (Start: 32 @52895 has 23 MA's), (43, 53045), (50, 53153),

Gene: CoveyB\_79 Start: 52387, Stop: 52764, Start Num: 32

Candidate Starts for CoveyB\_79:

(15, 51844), (16, 51880), (25, 52201), (29, 52324), (Start: 32 @52387 has 23 MA's), (43, 52537), (50, 52645),

Gene: Danyall\_79 Start: 52090, Stop: 52458, Start Num: 32

Candidate Starts for Danyall\_79:

(1, 51058), (4, 51262), (29, 52027), (Start: 32 @52090 has 23 MA's), (43, 52231), (50, 52339),

Gene: Derg\_55 Start: 46968, Stop: 47240, Start Num: 38

Candidate Starts for Derg\_55:

(Start: 34 @46920 has 1 MA's), (35, 46953), (Start: 36 @46956 has 1 MA's), (Start: 38 @46968 has 8 MA's), (39, 46971), (46, 47097), (52, 47172),

Gene: Egi03\_78 Start: 51947, Stop: 52324, Start Num: 32

Candidate Starts for Egi03\_78:

(29, 51884), (Start: 32 @51947 has 23 MA's), (43, 52097), (50, 52205),

Gene: Evamon\_78 Start: 52312, Stop: 52689, Start Num: 32

Candidate Starts for Evamon\_78:

(29, 52249), (Start: 32 @52312 has 23 MA's), (43, 52462), (50, 52570),

Gene: Fireball\_81 Start: 52875, Stop: 53255, Start Num: 32

Candidate Starts for Fireball\_81:

(10, 52179), (12, 52248), (14, 52254), (18, 52404), (20, 52419), (25, 52689), (29, 52812), (Start: 32 @52875 has 23 MA's), (43, 53025), (50, 53133),

Gene: Flatwoods\_60 Start: 47605, Stop: 47880, Start Num: 37

Candidate Starts for Flatwoods\_60:

(6, 46717), (13, 46900), (26, 47374), (27, 47428), (28, 47464), (31, 47503), (Start: 34 @47560 has 1 MA's), (35, 47593), (Start: 37 @47605 has 2 MA's), (Start: 38 @47608 has 8 MA's), (39, 47611), (45, 47722), (52, 47812),

Gene: Gaea\_62 Start: 48297, Stop: 48569, Start Num: 38

Candidate Starts for Gaea\_62:

(30, 48183), (33, 48237), (Start: 36 @48285 has 1 MA's), (Start: 38 @48297 has 8 MA's), (39, 48300), (49, 48465), (52, 48501),

Gene: Gezellig\_78 Start: 52140, Stop: 52517, Start Num: 32

Candidate Starts for Gezellig\_78:

(15, 51597), (16, 51633), (25, 51954), (29, 52077), (Start: 32 @52140 has 23 MA's), (43, 52290), (50, 52398), (51, 52425), (53, 52449),

Gene: Gustavo\_62 Start: 48964, Stop: 49236, Start Num: 38

Candidate Starts for Gustavo\_62:

(27, 48784), (28, 48820), (31, 48859), (35, 48949), (Start: 37 @48961 has 2 MA's), (Start: 38 @48964 has 8 MA's), (39, 48967), (41, 49003), (45, 49078), (52, 49168),

Gene: Halo3\_76 Start: 52725, Stop: 53102, Start Num: 32

Candidate Starts for Halo3\_76:

(15, 52182), (16, 52218), (25, 52539), (29, 52662), (Start: 32 @52725 has 23 MA's), (43, 52875), (50, 52983),

Gene: Jambalaya\_75 Start: 51368, Stop: 51745, Start Num: 32

Candidate Starts for Jambalaya\_75:

(29, 51305), (Start: 32 @51368 has 23 MA's), (43, 51518), (53, 51677),

Gene: KimmyK\_78 Start: 52587, Stop: 52964, Start Num: 32

Candidate Starts for KimmyK\_78:

(15, 52044), (16, 52080), (25, 52401), (29, 52524), (Start: 32 @52587 has 23 MA's), (43, 52737), (50, 52845), (51, 52872), (53, 52896),

Gene: Kroos\_60 Start: 48657, Stop: 48977, Start Num: 34

Candidate Starts for Kroos\_60:

(6, 47814), (13, 47997), (26, 48471), (27, 48525), (28, 48561), (31, 48600), (Start: 34 @48657 has 1 MA's), (35, 48690), (Start: 37 @48702 has 2 MA's), (Start: 38 @48705 has 8 MA's), (39, 48708), (45, 48819), (48, 48855), (52, 48909),

Gene: Kwobi\_62 Start: 49106, Stop: 49378, Start Num: 38

Candidate Starts for Kwobi\_62:

(8, 48278), (13, 48398), (26, 48872), (27, 48926), (28, 48962), (31, 49001), (Start: 34 @49058 has 1 MA's), (35, 49091), (Start: 37 @49103 has 2 MA's), (Start: 38 @49106 has 8 MA's), (39, 49109), (45, 49220), (52, 49310),

Gene: LilHam\_56 Start: 46247, Stop: 46519, Start Num: 38

Candidate Starts for LilHam\_56:

(30, 46133), (33, 46187), (Start: 36 @46235 has 1 MA's), (Start: 38 @46247 has 8 MA's), (39, 46250), (48, 46397), (49, 46415), (52, 46451),

Gene: Lilbeanie\_61 Start: 43535, Stop: 43810, Start Num: 38

Candidate Starts for Lilbeanie\_61:

(22, 43082), (24, 43181), (Start: 38 @43535 has 8 MA's), (39, 43538), (44, 43607), (47, 43685), (49, 43709), (54, 43766),

Gene: McKinley\_64 Start: 49837, Stop: 50109, Start Num: 38

Candidate Starts for McKinley\_64:

(Start: 36 @49825 has 1 MA's), (Start: 38 @49837 has 8 MA's), (45, 49951), (48, 49987), (52, 50041),

Gene: Mutzi\_76 Start: 52845, Stop: 53222, Start Num: 32

Candidate Starts for Mutzi\_76:

(17, 52392), (19, 52413), (29, 52782), (Start: 32 @52845 has 23 MA's), (43, 52995), (50, 53103),

Gene: Nubi\_77 Start: 51637, Stop: 52017, Start Num: 32

Candidate Starts for Nubi\_77:

(25, 51451), (29, 51574), (Start: 32 @51637 has 23 MA's), (40, 51736), (53, 51946),

Gene: Phlop\_76 Start: 52190, Stop: 52567, Start Num: 32

Candidate Starts for Phlop\_76:

(23, 51896), (29, 52127), (Start: 32 @52190 has 23 MA's), (43, 52340), (50, 52448),

Gene: PinkCoffee\_80 Start: 52131, Stop: 52499, Start Num: 32

Candidate Starts for PinkCoffee\_80:

(1, 51099), (4, 51303), (29, 52068), (Start: 32 @52131 has 23 MA's), (43, 52272), (50, 52380), (51, 52407), (53, 52431),

Gene: Portcullis\_79 Start: 52265, Stop: 52576, Start Num: 32

Candidate Starts for Portcullis\_79:

(29, 52208), (Start: 32 @52265 has 23 MA's), (42, 52388), (43, 52403), (50, 52511),

Gene: PullumCavea\_77 Start: 52367, Stop: 52744, Start Num: 32

Candidate Starts for PullumCavea\_77:

(23, 52073), (29, 52304), (Start: 32 @52367 has 23 MA's), (43, 52517), (50, 52625),

Gene: Ribeye\_60 Start: 48019, Stop: 48303, Start Num: 36

Candidate Starts for Ribeye\_60:

(Start: 34 @47983 has 1 MA's), (35, 48016), (Start: 36 @48019 has 1 MA's), (Start: 38 @48031 has 8 MA's), (39, 48034), (45, 48145), (52, 48235),

Gene: RogerDodger\_82 Start: 52955, Stop: 53332, Start Num: 32

Candidate Starts for RogerDodger\_82:

(23, 52661), (29, 52892), (Start: 32 @52955 has 23 MA's), (43, 53105), (50, 53213),

Gene: Salvador\_78 Start: 52310, Stop: 52687, Start Num: 32

Candidate Starts for Salvador\_78:

(29, 52247), (Start: 32 @52310 has 23 MA's), (43, 52460), (50, 52568),

Gene: Saronaya\_62 Start: 48964, Stop: 49236, Start Num: 38

Candidate Starts for Saronaya\_62:

(27, 48784), (28, 48820), (31, 48859), (35, 48949), (Start: 37 @48961 has 2 MA's), (Start: 38 @48964 has 8 MA's), (39, 48967), (41, 49003), (45, 49078), (52, 49168),

Gene: Savbucketdawg\_74 Start: 51702, Stop: 52079, Start Num: 32

Candidate Starts for Savbucketdawg\_74:

(15, 51159), (16, 51195), (25, 51516), (29, 51639), (Start: 32 @51702 has 23 MA's), (43, 51852), (50, 51960),

Gene: SchottB\_59 Start: 48874, Stop: 49146, Start Num: 38

Candidate Starts for SchottB\_59:

(31, 48769), (Start: 34 @48826 has 1 MA's), (35, 48859), (Start: 37 @48871 has 2 MA's), (Start: 38 @48874 has 8 MA's), (39, 48877), (45, 48988), (52, 49078),

Gene: SmokingBunny\_79 Start: 53306, Stop: 53683, Start Num: 32

Candidate Starts for SmokingBunny\_79:

(29, 53243), (Start: 32 @53306 has 23 MA's), (43, 53456), (50, 53564),

Gene: StorminNorm\_60 Start: 48603, Stop: 48878, Start Num: 37

Candidate Starts for StorminNorm\_60:

(27, 48426), (28, 48462), (31, 48501), (Start: 34 @48558 has 1 MA's), (35, 48591), (Start: 37 @48603 has 2 MA's), (Start: 38 @48606 has 8 MA's), (39, 48609), (41, 48645), (45, 48720), (52, 48810),

Gene: Tangerine\_61 Start: 48357, Stop: 48629, Start Num: 38

Candidate Starts for Tangerine\_61:

(27, 48177), (28, 48213), (31, 48252), (35, 48342), (Start: 37 @48354 has 2 MA's), (Start: 38 @48357 has 8 MA's), (39, 48360), (41, 48396), (45, 48471), (48, 48507), (52, 48561),

Gene: Togo\_78 Start: 53306, Stop: 53683, Start Num: 32  
Candidate Starts for Togo\_78:  
(29, 53243), (Start: 32 @53306 has 23 MA's), (43, 53456), (50, 53564),

Gene: Twister6\_79 Start: 51655, Stop: 52032, Start Num: 32  
Candidate Starts for Twister6\_79:  
(29, 51592), (Start: 32 @51655 has 23 MA's), (43, 51805), (50, 51913),

Gene: Tycho\_59 Start: 48079, Stop: 48399, Start Num: 34  
Candidate Starts for Tycho\_59:  
(2, 47158), (3, 47191), (5, 47224), (7, 47278), (9, 47332), (11, 47407), (26, 47893), (27, 47947), (28, 47983), (31, 48022), (Start: 34 @48079 has 1 MA's), (35, 48112), (Start: 37 @48124 has 2 MA's), (Start: 38 @48127 has 8 MA's), (39, 48130), (45, 48241), (52, 48331),

Gene: Valary\_79 Start: 52962, Stop: 53339, Start Num: 32  
Candidate Starts for Valary\_79:  
(15, 52419), (16, 52455), (25, 52776), (29, 52899), (Start: 32 @52962 has 23 MA's), (43, 53112), (50, 53220), (51, 53247), (53, 53271),

Gene: Wizard\_75 Start: 52140, Stop: 52517, Start Num: 32  
Candidate Starts for Wizard\_75:  
(15, 51597), (16, 51633), (25, 51954), (29, 52077), (Start: 32 @52140 has 23 MA's), (43, 52290), (50, 52398),

Gene: YungMoney\_77 Start: 53685, Stop: 54062, Start Num: 32  
Candidate Starts for YungMoney\_77:  
(17, 53232), (19, 53253), (29, 53622), (Start: 32 @53685 has 23 MA's), (43, 53835), (50, 53943),