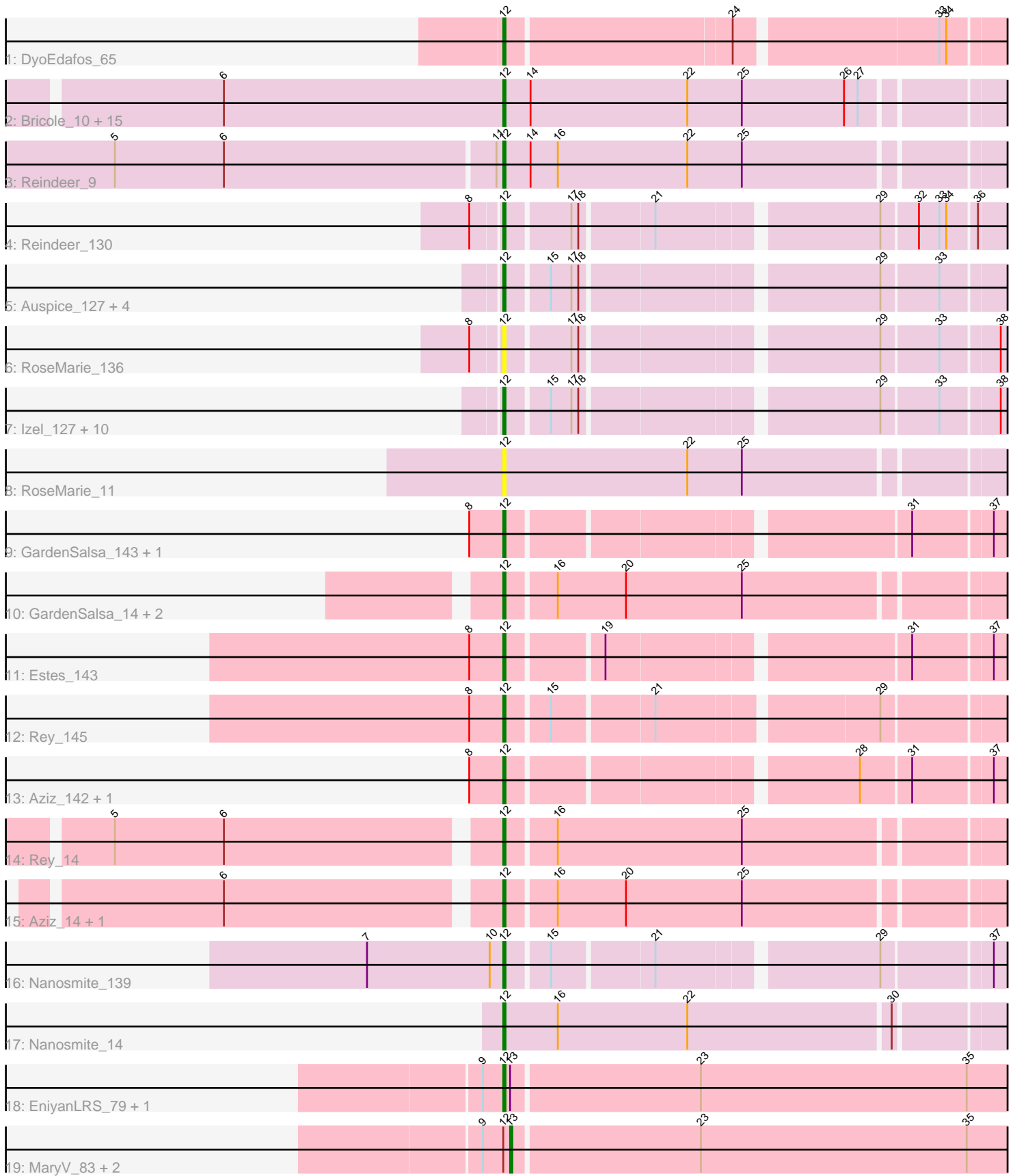


# Zoomed Pham 308685



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 308685 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308685 has 56 members, 6 are drafts.

Phages represented in each track:

- Track 1 : DyoEdafos\_65
- Track 2 : Bricole\_10, TpudiCK\_11, Glaske16\_11, Dulcita\_11, Diminimus\_11, IPhane7\_10, KleverKiS\_10, Bongo\_10, Skinny\_11, FreakyGoo\_11, SlimJimmy\_10, LilhomieP\_10, PegLeg\_10, TyDawg\_10, Izel\_11, Auspice\_10
- Track 3 : Reindeer\_9
- Track 4 : Reindeer\_130
- Track 5 : Auspice\_127, IPhane7\_125, Bongo\_126, TyDawg\_122, Bricole\_129
- Track 6 : RoseMarie\_136
- Track 7 : Izel\_127, TpudiCK\_128, Dulcita\_127, Glaske16\_129, FreakyGoo\_127, Skinny\_133, PegLeg\_130, Diminimus\_127, LilhomieP\_127, SlimJimmy\_126, KleverKiS\_130
- Track 8 : RoseMarie\_11
- Track 9 : GardenSalsa\_143, MrMagoo\_145
- Track 10 : GardenSalsa\_14, MrMagoo\_14, Estes\_15
- Track 11 : Estes\_143
- Track 12 : Rey\_145
- Track 13 : Aziz\_142, GenevaB15\_145
- Track 14 : Rey\_14
- Track 15 : Aziz\_14, GenevaB15\_14
- Track 16 : Nanosmite\_139
- Track 17 : Nanosmite\_14
- Track 18 : EniyanLRS\_79, Azrael100\_82
- Track 19 : MaryV\_83, Cosmo\_83, Wildcat\_83

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

The start number called the most often in the published annotations is 12, it was called in 47 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_10, Auspice\_127, Aziz\_14, Aziz\_142, Azrael100\_82, Bongo\_10, Bongo\_126, Bricole\_10, Bricole\_129, Diminimus\_11, Diminimus\_127, Dulcita\_11, Dulcita\_127, DyoEdafos\_65, EniyanLRS\_79, Estes\_143, Estes\_15, FreakyGoo\_11, FreakyGoo\_127, GardenSalsa\_14, GardenSalsa\_143, GenevaB15\_14,

GenevaB15\_145, Glaske16\_11, Glaske16\_129, IPHane7\_10, IPHane7\_125, Izel\_11, Izel\_127, KleverKiS\_10, KleverKiS\_130, LilhomieP\_10, LilhomieP\_127, MrMagoo\_14, MrMagoo\_145, Nanosmite\_139, Nanosmite\_14, PegLeg\_10, PegLeg\_130, Reindeer\_130, Reindeer\_9, Rey\_14, Rey\_145, RoseMarie\_11, RoseMarie\_136, Skinny\_11, Skinny\_133, SlimJimmy\_10, SlimJimmy\_126, TpudiCK\_11, TpudiCK\_128, TyDawg\_10, TyDawg\_122,

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

- Cosmo\_83, MaryV\_83, Wildcat\_83,

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

- 

### Summary by start number:

Start 12:

- Found in 56 of 56 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 47 of 50
- Called 94.6% of time when present
- Phage (with cluster) where this start called: Auspice\_10 (M1), Auspice\_127 (M1), Aziz\_14 (M2), Aziz\_142 (M2), Azrael100\_82 (V), Bongo\_10 (M1), Bongo\_126 (M1), Bricole\_10 (M1), Bricole\_129 (M1), Diminimus\_11 (M1), Diminimus\_127 (M1), Dulcita\_11 (M1), Dulcita\_127 (M1), DyoEdafos\_65 (L4), EniyanLRS\_79 (V), Estes\_143 (M2), Estes\_15 (M2), FreakyGoo\_11 (M1), FreakyGoo\_127 (M1), GardenSalsa\_14 (M2), GardenSalsa\_143 (M2), GenevaB15\_14 (M2), GenevaB15\_145 (M2), Glaske16\_11 (M1), Glaske16\_129 (M1), IPHane7\_10 (M1), IPHane7\_125 (M1), Izel\_11 (M1), Izel\_127 (M1), KleverKiS\_10 (M1), KleverKiS\_130 (M1), LilhomieP\_10 (M1), LilhomieP\_127 (M1), MrMagoo\_14 (M2), MrMagoo\_145 (M2), Nanosmite\_139 (M3), Nanosmite\_14 (M3), PegLeg\_10 (M1), PegLeg\_130 (M1), Reindeer\_130 (M1), Reindeer\_9 (M1), Rey\_14 (M2), Rey\_145 (M2), RoseMarie\_11 (M1), RoseMarie\_136 (M1), Skinny\_11 (M1), Skinny\_133 (M1), SlimJimmy\_10 (M1), SlimJimmy\_126 (M1), TpudiCK\_11 (M1), TpudiCK\_128 (M1), TyDawg\_10 (M1), TyDawg\_122 (M1),

Start 13:

- Found in 5 of 56 ( 8.9% ) of genes in pham
- Manual Annotations of this start: 3 of 50
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Cosmo\_83 (V), MaryV\_83 (V), Wildcat\_83 (V),

### Summary by clusters:

There are 5 clusters represented in this pham: L4, V, M1, M3, M2,

Info for manual annotations of cluster L4:

- Start number 12 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster M1:

- Start number 12 was manually annotated 30 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 12 was manually annotated 12 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 12 was manually annotated 2 times for cluster M3.

Info for manual annotations of cluster V:

- Start number 12 was manually annotated 2 times for cluster V.
- Start number 13 was manually annotated 3 times for cluster V.

### **Gene Information:**

Gene: Auspice\_127 Start: 66745, Stop: 66978, Start Num: 12

Candidate Starts for Auspice\_127:

(Start: 12 @66745 has 47 MA's), (15, 66763), (17, 66772), (18, 66775), (29, 66895), (33, 66919),

Gene: Auspice\_10 Start: 3645, Stop: 3415, Start Num: 12

Candidate Starts for Auspice\_10:

(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: Aziz\_142 Start: 67993, Stop: 68220, Start Num: 12

Candidate Starts for Aziz\_142:

(8, 67978), (Start: 12 @67993 has 47 MA's), (28, 68134), (31, 68155), (37, 68188), (41, 68215),

Gene: Aziz\_14 Start: 4266, Stop: 4039, Start Num: 12

Candidate Starts for Aziz\_14:

(6, 4380), (Start: 12 @4266 has 47 MA's), (16, 4245), (20, 4215), (25, 4164),

Gene: Azrael100\_82 Start: 51913, Stop: 52149, Start Num: 12

Candidate Starts for Azrael100\_82:

(9, 51904), (Start: 12 @51913 has 47 MA's), (Start: 13 @51916 has 3 MA's), (23, 51997), (35, 52114),

Gene: Bongo\_10 Start: 3645, Stop: 3415, Start Num: 12

Candidate Starts for Bongo\_10:

(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: Bongo\_126 Start: 66361, Stop: 66594, Start Num: 12

Candidate Starts for Bongo\_126:

(Start: 12 @66361 has 47 MA's), (15, 66379), (17, 66388), (18, 66391), (29, 66511), (33, 66535),

Gene: Bricole\_10 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for Bricole\_10:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Bricole\_129 Start: 66509, Stop: 66742, Start Num: 12

Candidate Starts for Bricole\_129:

(Start: 12 @66509 has 47 MA's), (15, 66527), (17, 66536), (18, 66539), (29, 66659), (33, 66683),

Gene: Cosmo\_83 Start: 51917, Stop: 52150, Start Num: 13

Candidate Starts for Cosmo\_83:

(9, 51905), (Start: 12 @51914 has 47 MA's), (Start: 13 @51917 has 3 MA's), (23, 51998), (35, 52115),

Gene: Diminimus\_11 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for Diminimus\_11:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Diminimus\_127 Start: 66177, Stop: 66410, Start Num: 12

Candidate Starts for Diminimus\_127:

(Start: 12 @66177 has 47 MA's), (15, 66195), (17, 66204), (18, 66207), (29, 66327), (33, 66351), (38, 66375),

Gene: Dulcita\_11 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for Dulcita\_11:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Dulcita\_127 Start: 66178, Stop: 66411, Start Num: 12

Candidate Starts for Dulcita\_127:

(Start: 12 @66178 has 47 MA's), (15, 66196), (17, 66205), (18, 66208), (29, 66328), (33, 66352), (38, 66376),

Gene: DyoEdafos\_65 Start: 44596, Stop: 44826, Start Num: 12

Candidate Starts for DyoEdafos\_65:

(Start: 12 @44596 has 47 MA's), (24, 44692), (33, 44776), (34, 44779),

Gene: EniyanLRS\_79 Start: 51653, Stop: 51889, Start Num: 12

Candidate Starts for EniyanLRS\_79:

(9, 51644), (Start: 12 @51653 has 47 MA's), (Start: 13 @51656 has 3 MA's), (23, 51737), (35, 51854),

Gene: Estes\_143 Start: 68165, Stop: 68392, Start Num: 12

Candidate Starts for Estes\_143:

(8, 68150), (Start: 12 @68165 has 47 MA's), (19, 68204), (31, 68327), (37, 68360), (41, 68387),

Gene: Estes\_15 Start: 4411, Stop: 4184, Start Num: 12

Candidate Starts for Estes\_15:

(Start: 12 @4411 has 47 MA's), (16, 4390), (20, 4360), (25, 4309),

Gene: FreakyGoo\_11 Start: 3645, Stop: 3415, Start Num: 12

Candidate Starts for FreakyGoo\_11:

(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: FreakyGoo\_127 Start: 66662, Stop: 66895, Start Num: 12

Candidate Starts for FreakyGoo\_127:

(Start: 12 @66662 has 47 MA's), (15, 66680), (17, 66689), (18, 66692), (29, 66812), (33, 66836), (38, 66860),

Gene: GardenSalsa\_143 Start: 68335, Stop: 68562, Start Num: 12

Candidate Starts for GardenSalsa\_143:

(8, 68320), (Start: 12 @68335 has 47 MA's), (31, 68497), (37, 68530), (41, 68557),

Gene: GardenSalsa\_14 Start: 4245, Stop: 4018, Start Num: 12

Candidate Starts for GardenSalsa\_14:  
(Start: 12 @4245 has 47 MA's), (16, 4224), (20, 4194), (25, 4143),

Gene: GenevaB15\_14 Start: 4266, Stop: 4039, Start Num: 12  
Candidate Starts for GenevaB15\_14:  
(6, 4380), (Start: 12 @4266 has 47 MA's), (16, 4245), (20, 4215), (25, 4164),

Gene: GenevaB15\_145 Start: 67993, Stop: 68220, Start Num: 12  
Candidate Starts for GenevaB15\_145:  
(8, 67978), (Start: 12 @67993 has 47 MA's), (28, 68134), (31, 68155), (37, 68188), (41, 68215),

Gene: Glaske16\_11 Start: 3644, Stop: 3414, Start Num: 12  
Candidate Starts for Glaske16\_11:  
(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Glaske16\_129 Start: 67296, Stop: 67529, Start Num: 12  
Candidate Starts for Glaske16\_129:  
(Start: 12 @67296 has 47 MA's), (15, 67314), (17, 67323), (18, 67326), (29, 67446), (33, 67470), (38, 67494),

Gene: IPHane7\_10 Start: 3645, Stop: 3415, Start Num: 12  
Candidate Starts for IPHane7\_10:  
(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: IPHane7\_125 Start: 66361, Stop: 66594, Start Num: 12  
Candidate Starts for IPHane7\_125:  
(Start: 12 @66361 has 47 MA's), (15, 66379), (17, 66388), (18, 66391), (29, 66511), (33, 66535),

Gene: Izel\_127 Start: 66177, Stop: 66410, Start Num: 12  
Candidate Starts for Izel\_127:  
(Start: 12 @66177 has 47 MA's), (15, 66195), (17, 66204), (18, 66207), (29, 66327), (33, 66351), (38, 66375),

Gene: Izel\_11 Start: 3644, Stop: 3414, Start Num: 12  
Candidate Starts for Izel\_11:  
(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: KleverKiS\_10 Start: 3641, Stop: 3411, Start Num: 12  
Candidate Starts for KleverKiS\_10:  
(2, 3887), (3, 3872), (4, 3863), (6, 3764), (Start: 12 @3641 has 47 MA's), (14, 3629), (22, 3560), (25, 3536), (26, 3491), (27, 3485),

Gene: KleverKiS\_130 Start: 67846, Stop: 68079, Start Num: 12  
Candidate Starts for KleverKiS\_130:  
(Start: 12 @67846 has 47 MA's), (15, 67864), (17, 67873), (18, 67876), (29, 67996), (33, 68020), (38, 68044),

Gene: LilhomieP\_10 Start: 3645, Stop: 3415, Start Num: 12  
Candidate Starts for LilhomieP\_10:

(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: LilhomieP\_127 Start: 67639, Stop: 67872, Start Num: 12

Candidate Starts for LilhomieP\_127:

(Start: 12 @67639 has 47 MA's), (15, 67657), (17, 67666), (18, 67669), (29, 67789), (33, 67813), (38, 67837),

Gene: MaryV\_83 Start: 51738, Stop: 51971, Start Num: 13

Candidate Starts for MaryV\_83:

(9, 51726), (Start: 12 @51735 has 47 MA's), (Start: 13 @51738 has 3 MA's), (23, 51819), (35, 51936),

Gene: MrMagoo\_145 Start: 68336, Stop: 68563, Start Num: 12

Candidate Starts for MrMagoo\_145:

(8, 68321), (Start: 12 @68336 has 47 MA's), (31, 68498), (37, 68531), (41, 68558),

Gene: MrMagoo\_14 Start: 4245, Stop: 4018, Start Num: 12

Candidate Starts for MrMagoo\_14:

(Start: 12 @4245 has 47 MA's), (16, 4224), (20, 4194), (25, 4143),

Gene: Nanosmite\_139 Start: 68420, Stop: 68656, Start Num: 12

Candidate Starts for Nanosmite\_139:

(7, 68360), (10, 68414), (Start: 12 @68420 has 47 MA's), (15, 68438), (21, 68480), (29, 68570), (37, 68615), (42, 68648),

Gene: Nanosmite\_14 Start: 4397, Stop: 4167, Start Num: 12

Candidate Starts for Nanosmite\_14:

(Start: 12 @4397 has 47 MA's), (16, 4373), (22, 4316), (30, 4229),

Gene: PegLeg\_130 Start: 67523, Stop: 67756, Start Num: 12

Candidate Starts for PegLeg\_130:

(Start: 12 @67523 has 47 MA's), (15, 67541), (17, 67550), (18, 67553), (29, 67673), (33, 67697), (38, 67721),

Gene: PegLeg\_10 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for PegLeg\_10:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Reindeer\_9 Start: 3514, Stop: 3284, Start Num: 12

Candidate Starts for Reindeer\_9:

(1, 3850), (3, 3748), (4, 3739), (5, 3682), (6, 3634), (11, 3517), (Start: 12 @3514 has 47 MA's), (14, 3502), (16, 3490), (22, 3433), (25, 3409),

Gene: Reindeer\_130 Start: 68776, Stop: 69009, Start Num: 12

Candidate Starts for Reindeer\_130:

(8, 68764), (Start: 12 @68776 has 47 MA's), (17, 68803), (18, 68806), (21, 68836), (29, 68926), (32, 68941), (33, 68950), (34, 68953), (36, 68965), (40, 68995), (42, 69004),

Gene: Rey\_145 Start: 67870, Stop: 68100, Start Num: 12

Candidate Starts for Rey\_145:

(8, 67855), (Start: 12 @67870 has 47 MA's), (15, 67888), (21, 67930), (29, 68020), (40, 68089),

Gene: Rey\_14 Start: 4475, Stop: 4248, Start Num: 12

Candidate Starts for Rey\_14:

(3, 4697), (4, 4688), (5, 4637), (6, 4589), (Start: 12 @4475 has 47 MA's), (16, 4454), (25, 4373),

Gene: RoseMarie\_136 Start: 70315, Stop: 70548, Start Num: 12

Candidate Starts for RoseMarie\_136:

(8, 70303), (Start: 12 @70315 has 47 MA's), (17, 70342), (18, 70345), (29, 70465), (33, 70489), (38, 70513), (40, 70534),

Gene: RoseMarie\_11 Start: 3892, Stop: 3662, Start Num: 12

Candidate Starts for RoseMarie\_11:

(Start: 12 @3892 has 47 MA's), (22, 3811), (25, 3787), (39, 3670),

Gene: Skinny\_11 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for Skinny\_11:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: Skinny\_133 Start: 68640, Stop: 68873, Start Num: 12

Candidate Starts for Skinny\_133:

(Start: 12 @68640 has 47 MA's), (15, 68658), (17, 68667), (18, 68670), (29, 68790), (33, 68814), (38, 68838),

Gene: SlimJimmy\_10 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for SlimJimmy\_10:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: SlimJimmy\_126 Start: 67349, Stop: 67582, Start Num: 12

Candidate Starts for SlimJimmy\_126:

(Start: 12 @67349 has 47 MA's), (15, 67367), (17, 67376), (18, 67379), (29, 67499), (33, 67523), (38, 67547),

Gene: TpudiCK\_11 Start: 3644, Stop: 3414, Start Num: 12

Candidate Starts for TpudiCK\_11:

(2, 3890), (3, 3875), (4, 3866), (6, 3767), (Start: 12 @3644 has 47 MA's), (14, 3632), (22, 3563), (25, 3539), (26, 3494), (27, 3488),

Gene: TpudiCK\_128 Start: 66182, Stop: 66415, Start Num: 12

Candidate Starts for TpudiCK\_128:

(Start: 12 @66182 has 47 MA's), (15, 66200), (17, 66209), (18, 66212), (29, 66332), (33, 66356), (38, 66380),

Gene: TyDawg\_122 Start: 66364, Stop: 66597, Start Num: 12

Candidate Starts for TyDawg\_122:

(Start: 12 @66364 has 47 MA's), (15, 66382), (17, 66391), (18, 66394), (29, 66514), (33, 66538),

Gene: TyDawg\_10 Start: 3645, Stop: 3415, Start Num: 12

Candidate Starts for TyDawg\_10:

(2, 3891), (3, 3876), (4, 3867), (6, 3768), (Start: 12 @3645 has 47 MA's), (14, 3633), (22, 3564), (25, 3540), (26, 3495), (27, 3489),

Gene: Wildcat\_83 Start: 51748, Stop: 51981, Start Num: 13

Candidate Starts for Wildcat\_83:

(9, 51736), (Start: 12 @51745 has 47 MA's), (Start: 13 @51748 has 3 MA's), (23, 51829), (35, 51946),