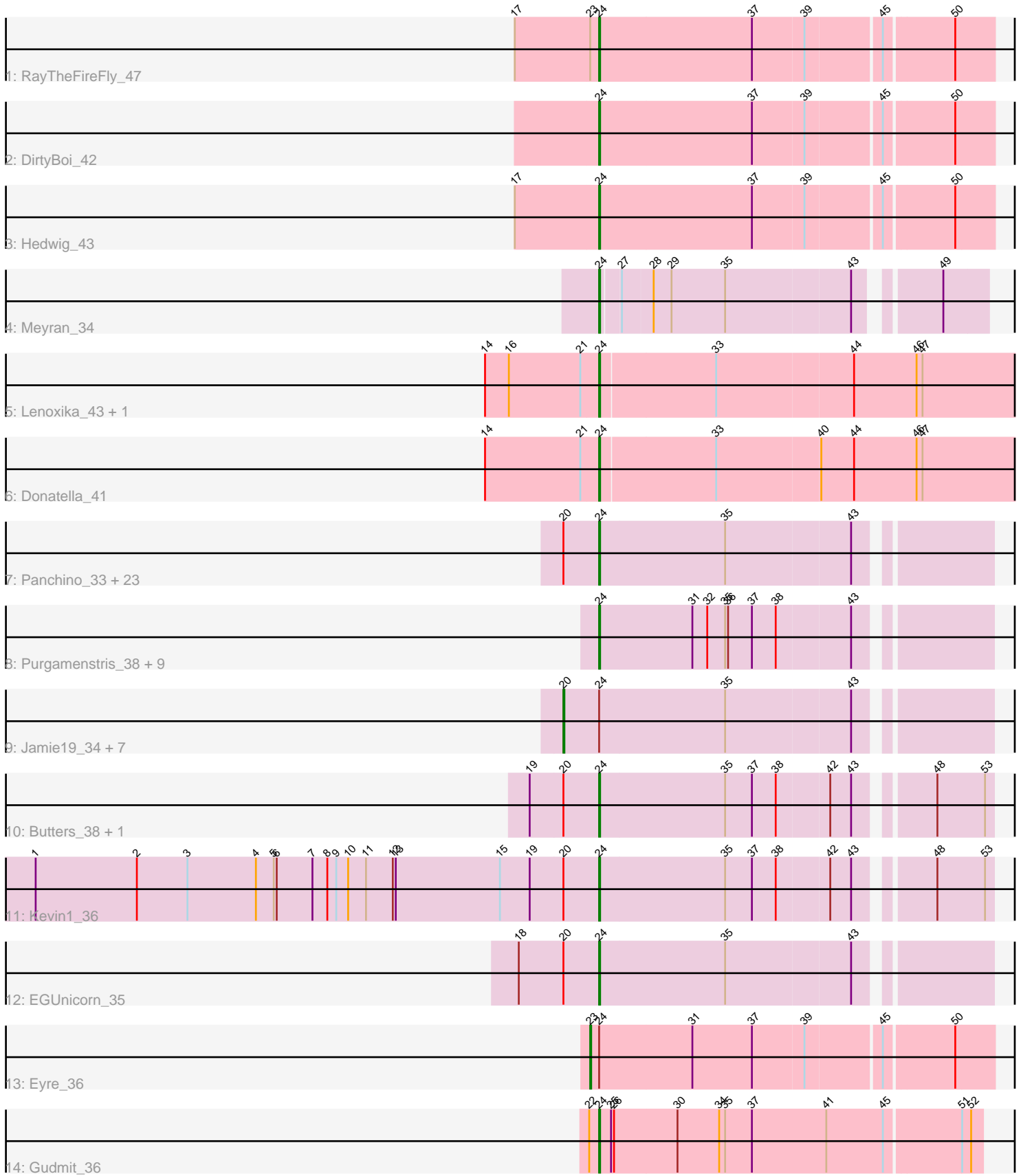


Pham 305058



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 305058 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305058 has 55 members, 2 are drafts.

Phages represented in each track:

- Track 1 : RayTheFireFly\_47
- Track 2 : DirtyBoi\_42
- Track 3 : Hedwig\_43
- Track 4 : Meyran\_34
- Track 5 : Lenoxika\_43, ToastyOats\_44
- Track 6 : Donatella\_41
- Track 7 : Panchino\_33, Carcharodon\_37, Duplicity\_37, Tapioca\_38, Phloss\_35, MichelleMyBell\_35, Gex\_37, Silvafighter\_38, Fulbright\_36, Journey\_35, Aggie\_35, Silvy\_35, Charlie\_35, Magsby\_37, Melville\_39, Phrann\_38, Andies\_34, Smurph\_37, Tortoise12\_35, SpongeBob\_34, Parmesanjohn\_37, Snekmaggedon\_34, Xerxes\_37, Philonius\_35
- Track 8 : Purgamenstris\_38, Hanako\_38, ShrimpFriedEgg\_38, Spinach\_38, PhancyPhin\_38, Nenae\_38, Raymond7\_32, Impisi\_40, BabeRuth\_39, Redi\_38
- Track 9 : Jamie19\_34, Bosection6\_35, SkinnyPete\_32, Xeno\_34, Shweta\_34, Chewbacca\_38, Schnauzer\_37, Pipsqueaks\_37
- Track 10 : Butters\_38, Rubeelu\_38
- Track 11 : Kevin1\_36
- Track 12 : EGUnicorn\_35
- Track 13 : Eyre\_36
- Track 14 : Gudmit\_36

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

The start number called the most often in the published annotations is 24, it was called in 44 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aggie\_35, Andies\_34, BabeRuth\_39, Butters\_38, Carcharodon\_37, Charlie\_35, DirtyBoi\_42, Donatella\_41, Duplicity\_37, EGUnicorn\_35, Fulbright\_36, Gex\_37, Gudmit\_36, Hanako\_38, Hedwig\_43, Impisi\_40, Journey\_35, Kevin1\_36, Lenoxika\_43, Magsby\_37, Melville\_39, Meyran\_34, MichelleMyBell\_35, Nenae\_38, Panchino\_33, Parmesanjohn\_37, PhancyPhin\_38, Philonius\_35, Phloss\_35, Phrann\_38, Purgamenstris\_38, RayTheFireFly\_47, Raymond7\_32, Redi\_38, Rubeelu\_38, ShrimpFriedEgg\_38, Silvafighter\_38, Silvy\_35, Smurph\_37,

Snekmaggedon\_34, Spinach\_38, SpongeBob\_34, Tapioca\_38, ToastyOats\_44, Tortoise12\_35, Xerxes\_37,

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

- Bosection6\_35, Chewbacca\_38, Eyre\_36, Jamie19\_34, Pipsqueaks\_37, Schnauzer\_37, Shweta\_34, SkinnyPete\_32, Xeno\_34,

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

- 

### Summary by start number:

Start 20:

- Found in 36 of 55 ( 65.5% ) of genes in pham
- Manual Annotations of this start: 8 of 53
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Bosection6\_35 (N), Chewbacca\_38 (N), Jamie19\_34 (N), Pipsqueaks\_37 (N), Schnauzer\_37 (N), Shweta\_34 (N), SkinnyPete\_32 (N), Xeno\_34 (N),

Start 23:

- Found in 2 of 55 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Eyre\_36 (singleton),

Start 24:

- Found in 55 of 55 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 44 of 53
- Called 83.6% of time when present
- Phage (with cluster) where this start called: Aggie\_35 (N), Andies\_34 (N), BabeRuth\_39 (N), Butters\_38 (N), Carcharodon\_37 (N), Charlie\_35 (N), DirtyBoi\_42 (DB), Donatella\_41 (FF), Duplicity\_37 (N), EGUnicorn\_35 (N), Fulbright\_36 (N), Gex\_37 (N), Gudmit\_36 (singleton), Hanako\_38 (N), Hedwig\_43 (DB), Impisi\_40 (N), Journey\_35 (N), Kevin1\_36 (N), Lenoxika\_43 (FF), Magsby\_37 (N), Melville\_39 (N), Meyran\_34 (DT), MichelleMyBell\_35 (N), Nенаe\_38 (N), Panchino\_33 (N), Parmesanjohn\_37 (N), PhancyPhin\_38 (N), Philonius\_35 (N), Phloss\_35 (N), Phrann\_38 (N), Purgamenstris\_38 (N), RayTheFireFly\_47 (DB), Raymond7\_32 (N), Redi\_38 (N), Rubeelu\_38 (N), ShrimpFriedEgg\_38 (N), Silvafighter\_38 (N), Silvy\_35 (N), Smurph\_37 (N), Snekmaggedon\_34 (N), Spinach\_38 (N), SpongeBob\_34 (N), Tapioca\_38 (N), ToastyOats\_44 (FF), Tortoise12\_35 (N), Xerxes\_37 (N),

### Summary by clusters:

There are 5 clusters represented in this pham: DT, DB, singleton, FF, N,

Info for manual annotations of cluster DB:

- Start number 24 was manually annotated 3 times for cluster DB.

Info for manual annotations of cluster DT:

- Start number 24 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster FF:

- Start number 24 was manually annotated 2 times for cluster FF.

Info for manual annotations of cluster N:

- Start number 20 was manually annotated 8 times for cluster N.
- Start number 24 was manually annotated 37 times for cluster N.

### **Gene Information:**

Gene: Aggie\_35 Start: 27766, Stop: 27395, Start Num: 24

Candidate Starts for Aggie\_35:

(Start: 20 @27802 has 8 MA's), (Start: 24 @27766 has 44 MA's), (35, 27640), (43, 27517),

Gene: Andies\_34 Start: 28284, Stop: 27913, Start Num: 24

Candidate Starts for Andies\_34:

(Start: 20 @28320 has 8 MA's), (Start: 24 @28284 has 44 MA's), (35, 28158), (43, 28035),

Gene: BabeRuth\_39 Start: 29411, Stop: 29040, Start Num: 24

Candidate Starts for BabeRuth\_39:

(Start: 24 @29411 has 44 MA's), (31, 29318), (32, 29303), (35, 29285), (36, 29282), (37, 29258), (38, 29234), (43, 29162),

Gene: Bosection6\_35 Start: 27823, Stop: 27416, Start Num: 20

Candidate Starts for Bosection6\_35:

(Start: 20 @27823 has 8 MA's), (Start: 24 @27787 has 44 MA's), (35, 27661), (43, 27538),

Gene: Butters\_38 Start: 29838, Stop: 29467, Start Num: 24

Candidate Starts for Butters\_38:

(19, 29907), (Start: 20 @29874 has 8 MA's), (Start: 24 @29838 has 44 MA's), (35, 29712), (37, 29685), (38, 29661), (42, 29610), (43, 29589), (48, 29523), (53, 29475),

Gene: Carcharodon\_37 Start: 29095, Stop: 28724, Start Num: 24

Candidate Starts for Carcharodon\_37:

(Start: 20 @29131 has 8 MA's), (Start: 24 @29095 has 44 MA's), (35, 28969), (43, 28846),

Gene: Charlie\_35 Start: 27786, Stop: 27415, Start Num: 24

Candidate Starts for Charlie\_35:

(Start: 20 @27822 has 8 MA's), (Start: 24 @27786 has 44 MA's), (35, 27660), (43, 27537),

Gene: Chewbacca\_38 Start: 29131, Stop: 28724, Start Num: 20

Candidate Starts for Chewbacca\_38:

(Start: 20 @29131 has 8 MA's), (Start: 24 @29095 has 44 MA's), (35, 28969), (43, 28846),

Gene: DirtyBoi\_42 Start: 31803, Stop: 31423, Start Num: 24

Candidate Starts for DirtyBoi\_42:

(Start: 24 @31803 has 44 MA's), (37, 31650), (39, 31599), (45, 31527), (50, 31461),

Gene: Donatella\_41 Start: 30320, Stop: 29892, Start Num: 24

Candidate Starts for Donatella\_41:

(14, 30434), (21, 30338), (Start: 24 @30320 has 44 MA's), (33, 30206), (40, 30104), (44, 30071), (46, 30008), (47, 30002),

Gene: Duplicity\_37 Start: 29104, Stop: 28733, Start Num: 24  
Candidate Starts for Duplicity\_37:  
(Start: 20 @29140 has 8 MA's), (Start: 24 @29104 has 44 MA's), (35, 28978), (43, 28855),

Gene: EGUunicorn\_35 Start: 27786, Stop: 27415, Start Num: 24  
Candidate Starts for EGUunicorn\_35:  
(18, 27867), (Start: 20 @27822 has 8 MA's), (Start: 24 @27786 has 44 MA's), (35, 27660), (43, 27537),

Gene: Eyre\_36 Start: 27990, Stop: 27601, Start Num: 23  
Candidate Starts for Eyre\_36:  
(Start: 23 @27990 has 1 MA's), (Start: 24 @27981 has 44 MA's), (31, 27888), (37, 27828), (39, 27777),  
(45, 27705), (50, 27639),

Gene: Fulbright\_36 Start: 28184, Stop: 27813, Start Num: 24  
Candidate Starts for Fulbright\_36:  
(Start: 20 @28220 has 8 MA's), (Start: 24 @28184 has 44 MA's), (35, 28058), (43, 27935),

Gene: Gex\_37 Start: 29111, Stop: 28740, Start Num: 24  
Candidate Starts for Gex\_37:  
(Start: 20 @29147 has 8 MA's), (Start: 24 @29111 has 44 MA's), (35, 28985), (43, 28862),

Gene: Gudmit\_36 Start: 27005, Stop: 26628, Start Num: 24  
Candidate Starts for Gudmit\_36:  
(22, 27014), (Start: 24 @27005 has 44 MA's), (25, 26993), (26, 26990), (30, 26927), (34, 26885), (35,  
26879), (37, 26852), (41, 26777), (45, 26720), (51, 26648), (52, 26639),

Gene: Hanako\_38 Start: 29410, Stop: 29039, Start Num: 24  
Candidate Starts for Hanako\_38:  
(Start: 24 @29410 has 44 MA's), (31, 29317), (32, 29302), (35, 29284), (36, 29281), (37, 29257), (38,  
29233), (43, 29161),

Gene: Hedwig\_43 Start: 32226, Stop: 31846, Start Num: 24  
Candidate Starts for Hedwig\_43:  
(17, 32310), (Start: 24 @32226 has 44 MA's), (37, 32073), (39, 32022), (45, 31950), (50, 31884),

Gene: Impisi\_40 Start: 29966, Stop: 29595, Start Num: 24  
Candidate Starts for Impisi\_40:  
(Start: 24 @29966 has 44 MA's), (31, 29873), (32, 29858), (35, 29840), (36, 29837), (37, 29813), (38,  
29789), (43, 29717),

Gene: Jamie19\_34 Start: 28201, Stop: 27794, Start Num: 20  
Candidate Starts for Jamie19\_34:  
(Start: 20 @28201 has 8 MA's), (Start: 24 @28165 has 44 MA's), (35, 28039), (43, 27916),

Gene: Journey\_35 Start: 27786, Stop: 27415, Start Num: 24  
Candidate Starts for Journey\_35:  
(Start: 20 @27822 has 8 MA's), (Start: 24 @27786 has 44 MA's), (35, 27660), (43, 27537),

Gene: Kevin1\_36 Start: 29017, Stop: 28646, Start Num: 24  
Candidate Starts for Kevin1\_36:  
(1, 29584), (2, 29482), (3, 29431), (4, 29362), (5, 29344), (6, 29341), (7, 29305), (8, 29290), (9, 29281),  
(10, 29269), (11, 29251), (12, 29224), (13, 29221), (15, 29116), (19, 29086), (Start: 20 @29053 has 8  
MA's), (Start: 24 @29017 has 44 MA's), (35, 28891), (37, 28864), (38, 28840), (42, 28789), (43,

28768), (48, 28702), (53, 28654),

Gene: Lenoxika\_43 Start: 30210, Stop: 29782, Start Num: 24

Candidate Starts for Lenoxika\_43:

(14, 30324), (16, 30300), (21, 30228), (Start: 24 @30210 has 44 MA's), (33, 30096), (44, 29961), (46, 29898), (47, 29892),

Gene: Magsby\_37 Start: 29112, Stop: 28741, Start Num: 24

Candidate Starts for Magsby\_37:

(Start: 20 @29148 has 8 MA's), (Start: 24 @29112 has 44 MA's), (35, 28986), (43, 28863),

Gene: Melville\_39 Start: 29096, Stop: 28725, Start Num: 24

Candidate Starts for Melville\_39:

(Start: 20 @29132 has 8 MA's), (Start: 24 @29096 has 44 MA's), (35, 28970), (43, 28847),

Gene: Meyran\_34 Start: 30905, Stop: 30549, Start Num: 24

Candidate Starts for Meyran\_34:

(Start: 24 @30905 has 44 MA's), (27, 30887), (28, 30857), (29, 30839), (35, 30785), (43, 30662), (49, 30593),

Gene: MichelleMyBell\_35 Start: 28103, Stop: 27732, Start Num: 24

Candidate Starts for MichelleMyBell\_35:

(Start: 20 @28139 has 8 MA's), (Start: 24 @28103 has 44 MA's), (35, 27977), (43, 27854),

Gene: Nenae\_38 Start: 29413, Stop: 29042, Start Num: 24

Candidate Starts for Nenae\_38:

(Start: 24 @29413 has 44 MA's), (31, 29320), (32, 29305), (35, 29287), (36, 29284), (37, 29260), (38, 29236), (43, 29164),

Gene: Panchino\_33 Start: 29511, Stop: 29140, Start Num: 24

Candidate Starts for Panchino\_33:

(Start: 20 @29547 has 8 MA's), (Start: 24 @29511 has 44 MA's), (35, 29385), (43, 29262),

Gene: Parmesanjohn\_37 Start: 29115, Stop: 28744, Start Num: 24

Candidate Starts for Parmesanjohn\_37:

(Start: 20 @29151 has 8 MA's), (Start: 24 @29115 has 44 MA's), (35, 28989), (43, 28866),

Gene: PhancyPhin\_38 Start: 29407, Stop: 29036, Start Num: 24

Candidate Starts for PhancyPhin\_38:

(Start: 24 @29407 has 44 MA's), (31, 29314), (32, 29299), (35, 29281), (36, 29278), (37, 29254), (38, 29230), (43, 29158),

Gene: Philonius\_35 Start: 27777, Stop: 27406, Start Num: 24

Candidate Starts for Philonius\_35:

(Start: 20 @27813 has 8 MA's), (Start: 24 @27777 has 44 MA's), (35, 27651), (43, 27528),

Gene: Phloss\_35 Start: 28522, Stop: 28151, Start Num: 24

Candidate Starts for Phloss\_35:

(Start: 20 @28558 has 8 MA's), (Start: 24 @28522 has 44 MA's), (35, 28396), (43, 28273),

Gene: Phrann\_38 Start: 30191, Stop: 29820, Start Num: 24

Candidate Starts for Phrann\_38:

(Start: 20 @30227 has 8 MA's), (Start: 24 @30191 has 44 MA's), (35, 30065), (43, 29942),

Gene: Pipsqueaks\_37 Start: 29128, Stop: 28721, Start Num: 20

Candidate Starts for Pipsqueaks\_37:

(Start: 20 @29128 has 8 MA's), (Start: 24 @29092 has 44 MA's), (35, 28966), (43, 28843),

Gene: Purgamenstris\_38 Start: 29411, Stop: 29040, Start Num: 24

Candidate Starts for Purgamenstris\_38:

(Start: 24 @29411 has 44 MA's), (31, 29318), (32, 29303), (35, 29285), (36, 29282), (37, 29258), (38, 29234), (43, 29162),

Gene: RayTheFireFly\_47 Start: 33400, Stop: 33020, Start Num: 24

Candidate Starts for RayTheFireFly\_47:

(17, 33484), (Start: 23 @33409 has 1 MA's), (Start: 24 @33400 has 44 MA's), (37, 33247), (39, 33196), (45, 33124), (50, 33058),

Gene: Raymond7\_32 Start: 29223, Stop: 28852, Start Num: 24

Candidate Starts for Raymond7\_32:

(Start: 24 @29223 has 44 MA's), (31, 29130), (32, 29115), (35, 29097), (36, 29094), (37, 29070), (38, 29046), (43, 28974),

Gene: Redi\_38 Start: 29410, Stop: 29039, Start Num: 24

Candidate Starts for Redi\_38:

(Start: 24 @29410 has 44 MA's), (31, 29317), (32, 29302), (35, 29284), (36, 29281), (37, 29257), (38, 29233), (43, 29161),

Gene: Rubeelu\_38 Start: 29838, Stop: 29467, Start Num: 24

Candidate Starts for Rubeelu\_38:

(19, 29907), (Start: 20 @29874 has 8 MA's), (Start: 24 @29838 has 44 MA's), (35, 29712), (37, 29685), (38, 29661), (42, 29610), (43, 29589), (48, 29523), (53, 29475),

Gene: Schnauzer\_37 Start: 29151, Stop: 28744, Start Num: 20

Candidate Starts for Schnauzer\_37:

(Start: 20 @29151 has 8 MA's), (Start: 24 @29115 has 44 MA's), (35, 28989), (43, 28866),

Gene: ShrimpFriedEgg\_38 Start: 29410, Stop: 29039, Start Num: 24

Candidate Starts for ShrimpFriedEgg\_38:

(Start: 24 @29410 has 44 MA's), (31, 29317), (32, 29302), (35, 29284), (36, 29281), (37, 29257), (38, 29233), (43, 29161),

Gene: Shweta\_34 Start: 28331, Stop: 27924, Start Num: 20

Candidate Starts for Shweta\_34:

(Start: 20 @28331 has 8 MA's), (Start: 24 @28295 has 44 MA's), (35, 28169), (43, 28046),

Gene: Silvafighter\_38 Start: 29088, Stop: 28717, Start Num: 24

Candidate Starts for Silvafighter\_38:

(Start: 20 @29124 has 8 MA's), (Start: 24 @29088 has 44 MA's), (35, 28962), (43, 28839),

Gene: Silvy\_35 Start: 27766, Stop: 27395, Start Num: 24

Candidate Starts for Silvy\_35:

(Start: 20 @27802 has 8 MA's), (Start: 24 @27766 has 44 MA's), (35, 27640), (43, 27517),

Gene: SkinnyPete\_32 Start: 26862, Stop: 26455, Start Num: 20

Candidate Starts for SkinnyPete\_32:

(Start: 20 @26862 has 8 MA's), (Start: 24 @26826 has 44 MA's), (35, 26700), (43, 26577),

Gene: Smurph\_37 Start: 29115, Stop: 28744, Start Num: 24

Candidate Starts for Smurph\_37:

(Start: 20 @29151 has 8 MA's), (Start: 24 @29115 has 44 MA's), (35, 28989), (43, 28866),

Gene: Snekmaggedon\_34 Start: 28165, Stop: 27794, Start Num: 24

Candidate Starts for Snekmaggedon\_34:

(Start: 20 @28201 has 8 MA's), (Start: 24 @28165 has 44 MA's), (35, 28039), (43, 27916),

Gene: Spinach\_38 Start: 29410, Stop: 29039, Start Num: 24

Candidate Starts for Spinach\_38:

(Start: 24 @29410 has 44 MA's), (31, 29317), (32, 29302), (35, 29284), (36, 29281), (37, 29257), (38, 29233), (43, 29161),

Gene: SpongeBob\_34 Start: 28165, Stop: 27794, Start Num: 24

Candidate Starts for SpongeBob\_34:

(Start: 20 @28201 has 8 MA's), (Start: 24 @28165 has 44 MA's), (35, 28039), (43, 27916),

Gene: Tapioca\_38 Start: 29081, Stop: 28710, Start Num: 24

Candidate Starts for Tapioca\_38:

(Start: 20 @29117 has 8 MA's), (Start: 24 @29081 has 44 MA's), (35, 28955), (43, 28832),

Gene: ToastyOats\_44 Start: 30397, Stop: 29969, Start Num: 24

Candidate Starts for ToastyOats\_44:

(14, 30511), (16, 30487), (21, 30415), (Start: 24 @30397 has 44 MA's), (33, 30283), (44, 30148), (46, 30085), (47, 30079),

Gene: Tortoise12\_35 Start: 27798, Stop: 27427, Start Num: 24

Candidate Starts for Tortoise12\_35:

(Start: 20 @27834 has 8 MA's), (Start: 24 @27798 has 44 MA's), (35, 27672), (43, 27549),

Gene: Xeno\_34 Start: 27588, Stop: 27181, Start Num: 20

Candidate Starts for Xeno\_34:

(Start: 20 @27588 has 8 MA's), (Start: 24 @27552 has 44 MA's), (35, 27426), (43, 27303),

Gene: Xerxes\_37 Start: 29112, Stop: 28741, Start Num: 24

Candidate Starts for Xerxes\_37:

(Start: 20 @29148 has 8 MA's), (Start: 24 @29112 has 44 MA's), (35, 28986), (43, 28863),