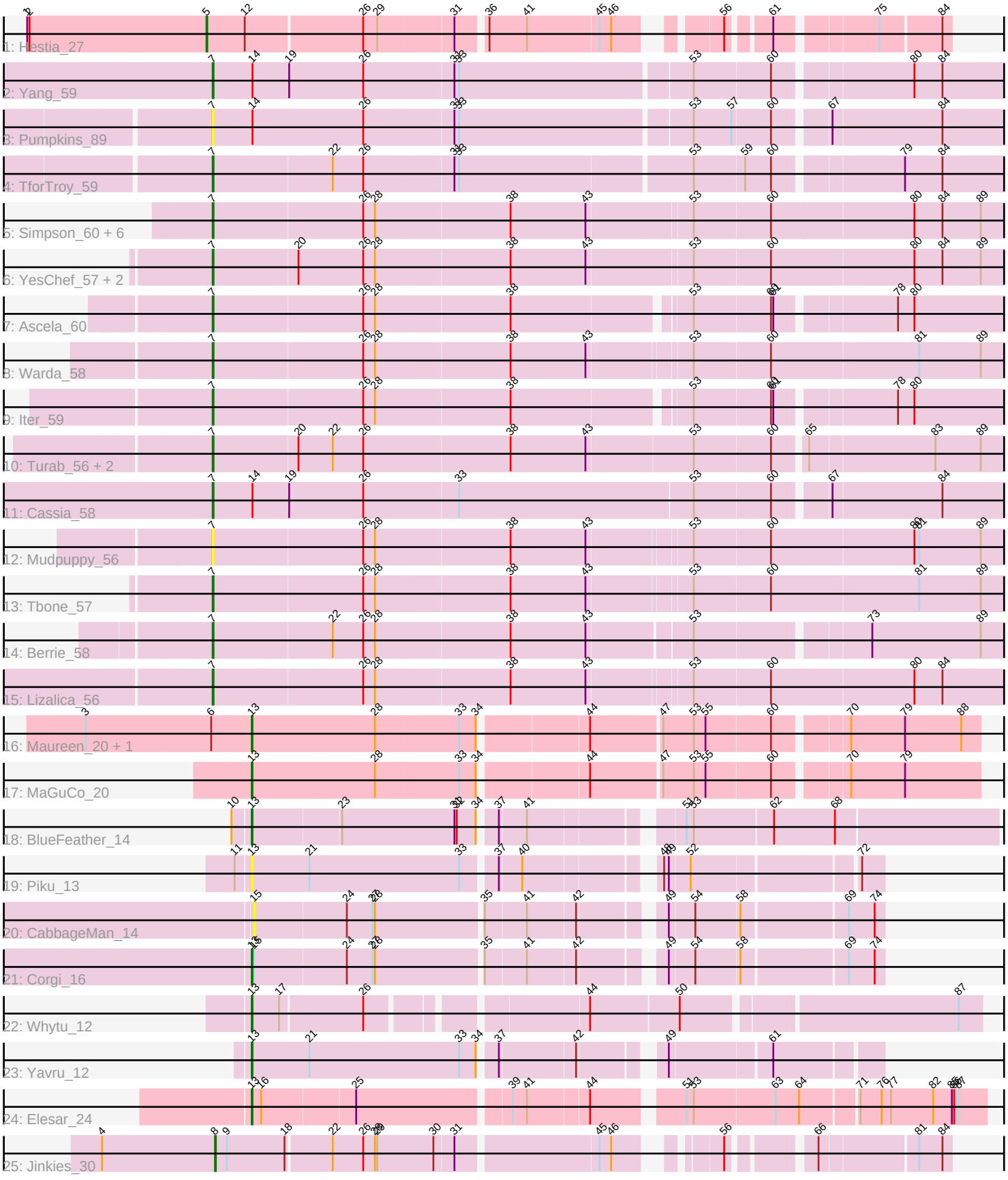
Pham 162026


1: Hestia_27
2: Yang_59
3: Pumpkins_89
4: TforTroy_59
5: Simpson_60 + 6
6: YesChef_57 + 2
7: Ascela_60
8: Warda_58
9: Iter_59
10: Turab_56 + 2
11: Cassia_58
12: Mudpuppy_56
13: Tbone_57
14: Berrie_58
15: Lizalica_56
16: Maureen_20 + 1
17: MaGuCo_20
18: BlueFeather_14
19: Piku_13
20: CabbageMan_14
21: Corgi_16
22: Whytu_12
23: Yavru_12
24: Elesar_24
25: Jinkies_30

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 162026 Report

This analysis was run 04/28/24 on database version 559.

Pham number 162026 has 36 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Hestia_27
• Track 2 : Yang_59
• Track 3 : Pumpkins_89
• Track 4 : TforTroy_59
• Track 5 : Simpson_60, Cyan_57, JohnDoe_58, Joemato_60, Lego_57, Kaylissa_59, Tutumahutu_59
• Track 6 : YesChef_57, AGrandiflora_59, Powerpuff_59
• Track 7 : Ascela_60
• Track 8 : Warda_58
• Track 9 : Iter_59
• Track 10 : Turab_56, AEgle_55, Adumb2043_56
• Track 11 : Cassia_58
• Track 12 : Mudpuppy_56
• Track 13 : Tbone_57
• Track 14 : Berrie_58
• Track 15 : Lizalica_56
• Track 16 : Maureen_20, Liebe_20
• Track 17 : MaGuCo_20
• Track 18 : BlueFeather_14
• Track 19 : Piku_13
• Track 20 : CabbageMan_14
• Track 21 : Corgi_16
• Track 22 : Whytu_12
• Track 23 : Yavru_12
• Track 24 : Elesar_24
• Track 25 : Jinkies_30

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

The start number called the most often in the published annotations is 7, it was called in 15 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AEgle_55, AGrandiflora_59, Adumb2043_56, Ascela_60, Berrie_58, Cassia_58, Cyan_57, Iter_59, Joemato_60, JohnDoe_58, Kaylissa_59, Lego_57, Lizalica_56, Mudpuppy_56, Powerpuff_59, Pumpkins_89, Simpson_60, Tbone_57, TforTroy_59, Turab_56, Tutumahutu_59, Warda_58, Yang_59, YesChef_57,

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

Genes that do not have the "Most Annotated" start:
• BlueFeather_14, CabbageMan_14, Corgi_16, Elesar_24, Hestia_27, Jinkies_30, Liebe_20, MaGuCo_20, Maureen_20, Piku_13, Whytu_12, Yavru_12,

Summary by start number:

Start 5:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hestia_27 (AY),

Start 7:
• Found in 24 of 36 (66.7%) of genes in pham
• Manual Annotations of this start: 15 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AEgle_55 (AZ1), AGrandiflora_59 (AZ1), Adumb2043_56 (AZ1), Ascela_60 (AZ1), Berrie_58 (AZ1), Cassia_58 (AZ1), Cyan_57 (AZ1), Iter_59 (AZ1), Joemato_60 (AZ1), JohnDoe_58 (AZ1), Kaylissa_59 (AZ1), Lego_57 (AZ1), Lizalica_56 (AZ1), Mudpuppy_56 (AZ1), Powerpuff_59 (AZ1), Pumpkins_89 (AZ1), Simpson_60 (AZ1), Tbone_57 (AZ1), TforTroy_59 (AZ1), Turab_56 (AZ1), Tutumahutu_59 (AZ1), Warda_58 (AZ1), Yang_59 (AZ1), YesChef_57 (AZ1),

Start 8:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jinkies_30 (FL),

Start 13:
• Found in 9 of 36 (25.0%) of genes in pham
• Manual Annotations of this start: 8 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueFeather_14 (FE), Corgi_16 (FE), Elesar_24 (FF), Liebe_20 (AZ2), MaGuCo_20 (AZ2), Maureen_20 (AZ2), Piku_13 (FE), Whytu_12 (FE), Yavru_12 (FE),

Start 15:
• Found in 2 of 36 (5.6%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: CabbageMan_14 (FE),

Summary by clusters:

There are 6 clusters represented in this pham: FE, FF, AY, AZ1, AZ2, FL,

Info for manual annotations of cluster AY:
•Start number 5 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster AZ1:
•Start number 7 was manually annotated 15 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 13 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster FE:
•Start number 13 was manually annotated 4 times for cluster FE.

Info for manual annotations of cluster FF:
•Start number 13 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FL:
•Start number 8 was manually annotated 1 time for cluster FL.

Gene Information:

Gene: AEgle_55 Start: 38287, Stop: 39267, Start Num: 7
Candidate Starts for AEgle_55:
(Start: 7 @38287 has 15 MA's), (20, 38392), (22, 38434), (26, 38473), (38, 38656), (43, 38752), (53, 38884), (60, 38980), (65, 39016), (83, 39172), (89, 39229),

Gene: AGrandiflora_59 Start: 39228, Stop: 40220, Start Num: 7
Candidate Starts for AGrandiflora_59:
(Start: 7 @39228 has 15 MA's), (20, 39333), (26, 39414), (28, 39429), (38, 39597), (43, 39693), (53, 39822), (60, 39918), (80, 40098), (84, 40134), (89, 40182),

Gene: Adumb2043_56 Start: 38310, Stop: 39290, Start Num: 7
Candidate Starts for Adumb2043_56:
(Start: 7 @38310 has 15 MA's), (20, 38415), (22, 38457), (26, 38496), (38, 38679), (43, 38775), (53, 38907), (60, 39003), (65, 39039), (83, 39195), (89, 39252),

Gene: Ascela_60 Start: 39485, Stop: 40450, Start Num: 7
Candidate Starts for Ascela_60:
(Start: 7 @39485 has 15 MA's), (26, 39671), (28, 39686), (38, 39854), (53, 40064), (60, 40160), (61, 40163), (78, 40304), (80, 40325),

Gene: Berrie_58 Start: 39288, Stop: 40256, Start Num: 7
Candidate Starts for Berrie_58:
(Start: 7 @39288 has 15 MA's), (22, 39435), (26, 39474), (28, 39489), (38, 39657), (43, 39753), (53, 39876), (73, 40083), (89, 40221),

Gene: BlueFeather_14 Start: 10715, Stop: 11602, Start Num: 13
Candidate Starts for BlueFeather_14:

(10, 10694), (Start: 13 @10715 has 8 MA's), (23, 10823), (31, 10967), (32, 10970), (34, 10994), (37, 11012), (41, 11045), (51, 11213), (53, 11222), (62, 11321), (68, 11399),

Gene: CabbageMan_14 Start: 11695, Stop: 12432, Start Num: 15
Candidate Starts for CabbageMan_14:
(15, 11695), (24, 11809), (27, 11842), (28, 11845), (35, 11977), (41, 12028), (42, 12088), (49, 12178), (54, 12208), (58, 12262), (69, 12388), (74, 12421),

Gene: Cassia_58 Start: 39217, Stop: 40194, Start Num: 7
Candidate Starts for Cassia_58:
(Start: 7 @39217 has 15 MA's), (14, 39268), (19, 39313), (26, 39406), (33, 39523), (53, 39814), (60, 39910), (67, 39973), (84, 40111),

Gene: Corgi_16 Start: 11850, Stop: 12590, Start Num: 13
Candidate Starts for Corgi_16:
(Start: 13 @11850 has 8 MA's), (15, 11853), (24, 11967), (27, 12000), (28, 12003), (35, 12135), (41, 12186), (42, 12246), (49, 12336), (54, 12366), (58, 12420), (69, 12546), (74, 12579),

Gene: Cyan_57 Start: 38971, Stop: 39963, Start Num: 7
Candidate Starts for Cyan_57:
(Start: 7 @38971 has 15 MA's), (26, 39157), (28, 39172), (38, 39340), (43, 39436), (53, 39565), (60, 39661), (80, 39841), (84, 39877), (89, 39925),

Gene: Elesar_24 Start: 18815, Stop: 19690, Start Num: 13
Candidate Starts for Elesar_24:
(Start: 13 @18815 has 8 MA's), (16, 18827), (25, 18941), (39, 19127), (41, 19145), (44, 19220), (51, 19322), (53, 19331), (63, 19433), (64, 19463), (71, 19529), (76, 19556), (77, 19568), (82, 19622), (85, 19646), (86, 19649), (87, 19655),

Gene: Hestia_27 Start: 19579, Stop: 20406, Start Num: 5
Candidate Starts for Hestia_27:
(1, 19351), (2, 19354), (Start: 5 @19579 has 1 MA's), (12, 19627), (26, 19768), (29, 19786), (31, 19879), (36, 19912), (41, 19960), (45, 20050), (46, 20065), (56, 20161), (61, 20206), (75, 20320), (84, 20395),

Gene: Iter_59 Start: 39256, Stop: 40221, Start Num: 7
Candidate Starts for Iter_59:
(Start: 7 @39256 has 15 MA's), (26, 39442), (28, 39457), (38, 39625), (53, 39835), (60, 39931), (61, 39934), (78, 40075), (80, 40096),

Gene: Jinkies_30 Start: 23927, Stop: 24739, Start Num: 8
Candidate Starts for Jinkies_30:
(4, 23789), (Start: 8 @23927 has 1 MA's), (9, 23942), (18, 24014), (22, 24068), (26, 24107), (28, 24122), (29, 24125), (30, 24194), (31, 24218), (45, 24389), (46, 24404), (56, 24494), (66, 24581), (81, 24698), (84, 24728),

Gene: Joemato_60 Start: 39052, Stop: 40044, Start Num: 7
Candidate Starts for Joemato_60:
(Start: 7 @39052 has 15 MA's), (26, 39238), (28, 39253), (38, 39421), (43, 39517), (53, 39646), (60, 39742), (80, 39922), (84, 39958), (89, 40006),

Gene: JohnDoe_58 Start: 39032, Stop: 40024, Start Num: 7
Candidate Starts for JohnDoe_58:

(Start: 7 @39032 has 15 MA's), (26, 39218), (28, 39233), (38, 39401), (43, 39497), (53, 39626), (60, 39722), (80, 39902), (84, 39938), (89, 39986),

Gene: Kaylissa_59 Start: 39430, Stop: 40422, Start Num: 7
Candidate Starts for Kaylissa_59:
(Start: 7 @39430 has 15 MA's), (26, 39616), (28, 39631), (38, 39799), (43, 39895), (53, 40024), (60, 40120), (80, 40300), (84, 40336), (89, 40384),

Gene: Lego_57 Start: 38749, Stop: 39741, Start Num: 7
Candidate Starts for Lego_57:
(Start: 7 @38749 has 15 MA's), (26, 38935), (28, 38950), (38, 39118), (43, 39214), (53, 39343), (60, 39439), (80, 39619), (84, 39655), (89, 39703),

Gene: Liebe_20 Start: 17855, Stop: 18736, Start Num: 13
Candidate Starts for Liebe_20:
(3, 17645), (6, 17804), (Start: 13 @17855 has 8 MA's), (28, 18011), (33, 18116), (34, 18137), (44, 18266), (47, 18353), (53, 18392), (55, 18407), (60, 18488), (70, 18572), (79, 18641), (88, 18713),

Gene: Lizalica_56 Start: 38292, Stop: 39275, Start Num: 7
Candidate Starts for Lizalica_56:
(Start: 7 @38292 has 15 MA's), (26, 38478), (28, 38493), (38, 38661), (43, 38757), (53, 38880), (60, 38976), (80, 39156), (84, 39192),

Gene: MaGuCo_20 Start: 17788, Stop: 18669, Start Num: 13
Candidate Starts for MaGuCo_20:
(Start: 13 @17788 has 8 MA's), (28, 17944), (33, 18049), (34, 18070), (44, 18199), (47, 18286), (53, 18325), (55, 18340), (60, 18421), (70, 18505), (79, 18574),

Gene: Maureen_20 Start: 17855, Stop: 18736, Start Num: 13
Candidate Starts for Maureen_20:
(3, 17645), (6, 17804), (Start: 13 @17855 has 8 MA's), (28, 18011), (33, 18116), (34, 18137), (44, 18266), (47, 18353), (53, 18392), (55, 18407), (60, 18488), (70, 18572), (79, 18641), (88, 18713),

Gene: Mudpuppy_56 Start: 38904, Stop: 39890, Start Num: 7
Candidate Starts for Mudpuppy_56:
(Start: 7 @38904 has 15 MA's), (26, 39090), (28, 39105), (38, 39273), (43, 39369), (53, 39492), (60, 39588), (80, 39768), (81, 39774), (89, 39852),

Gene: Piku_13 Start: 11038, Stop: 11766, Start Num: 13
Candidate Starts for Piku_13:
(11, 11020), (Start: 13 @11038 has 8 MA's), (21, 11110), (33, 11302), (37, 11341), (40, 11368), (48, 11515), (49, 11521), (52, 11545), (72, 11740),

Gene: Powerpuff_59 Start: 39951, Stop: 40943, Start Num: 7
Candidate Starts for Powerpuff_59:
(Start: 7 @39951 has 15 MA's), (20, 40056), (26, 40137), (28, 40152), (38, 40320), (43, 40416), (53, 40545), (60, 40641), (80, 40821), (84, 40857), (89, 40905),

Gene: Pumpkins_89 Start: 39599, Stop: 40567, Start Num: 7
Candidate Starts for Pumpkins_89:
(Start: 7 @39599 has 15 MA's), (14, 39650), (26, 39788), (31, 39899), (33, 39905), (53, 40187), (57, 40235), (60, 40283), (67, 40346), (84, 40484),

Gene: Simpson_60 Start: 39056, Stop: 40048, Start Num: 7
Candidate Starts for Simpson_60:
(Start: 7 @39056 has 15 MA's), (26, 39242), (28, 39257), (38, 39425), (43, 39521), (53, 39650), (60, 39746), (80, 39926), (84, 39962), (89, 40010),

Gene: Tbone_57 Start: 39387, Stop: 40373, Start Num: 7
Candidate Starts for Tbone_57:
(Start: 7 @39387 has 15 MA's), (26, 39573), (28, 39588), (38, 39756), (43, 39852), (53, 39975), (60, 40071), (81, 40257), (89, 40335),

Gene: TforTroy_59 Start: 39527, Stop: 40492, Start Num: 7
Candidate Starts for TforTroy_59:
(Start: 7 @39527 has 15 MA's), (22, 39674), (26, 39713), (31, 39824), (33, 39830), (53, 40112), (59, 40175), (60, 40208), (79, 40361), (84, 40409),

Gene: Turab_56 Start: 38331, Stop: 39311, Start Num: 7
Candidate Starts for Turab_56:
(Start: 7 @38331 has 15 MA's), (20, 38436), (22, 38478), (26, 38517), (38, 38700), (43, 38796), (53, 38928), (60, 39024), (65, 39060), (83, 39216), (89, 39273),

Gene: Tutumahutu_59 Start: 39023, Stop: 40015, Start Num: 7
Candidate Starts for Tutumahutu_59:
(Start: 7 @39023 has 15 MA's), (26, 39209), (28, 39224), (38, 39392), (43, 39488), (53, 39617), (60, 39713), (80, 39893), (84, 39929), (89, 39977),

Gene: Warda_58 Start: 39113, Stop: 40099, Start Num: 7
Candidate Starts for Warda_58:
(Start: 7 @39113 has 15 MA's), (26, 39299), (28, 39314), (38, 39482), (43, 39578), (53, 39701), (60, 39797), (81, 39983), (89, 40061),

Gene: Whytu_12 Start: 10993, Stop: 11844, Start Num: 13
Candidate Starts for Whytu_12:
(Start: 13 @10993 has 8 MA's), (17, 11026), (26, 11125), (44, 11371), (50, 11482), (87, 11815),

Gene: Yang_59 Start: 39529, Stop: 40497, Start Num: 7
Candidate Starts for Yang_59:
(Start: 7 @39529 has 15 MA's), (14, 39580), (19, 39625), (26, 39718), (31, 39829), (33, 39835), (53, 40117), (60, 40213), (80, 40378), (84, 40414),

Gene: Yavru_12 Start: 11017, Stop: 11745, Start Num: 13
Candidate Starts for Yavru_12:
(Start: 13 @11017 has 8 MA's), (21, 11089), (33, 11281), (34, 11302), (37, 11320), (42, 11413), (49, 11500), (61, 11620),

Gene: YesChef_57 Start: 38810, Stop: 39802, Start Num: 7
Candidate Starts for YesChef_57:
(Start: 7 @38810 has 15 MA's), (20, 38915), (26, 38996), (28, 39011), (38, 39179), (43, 39275), (53, 39404), (60, 39500), (80, 39680), (84, 39716), (89, 39764),