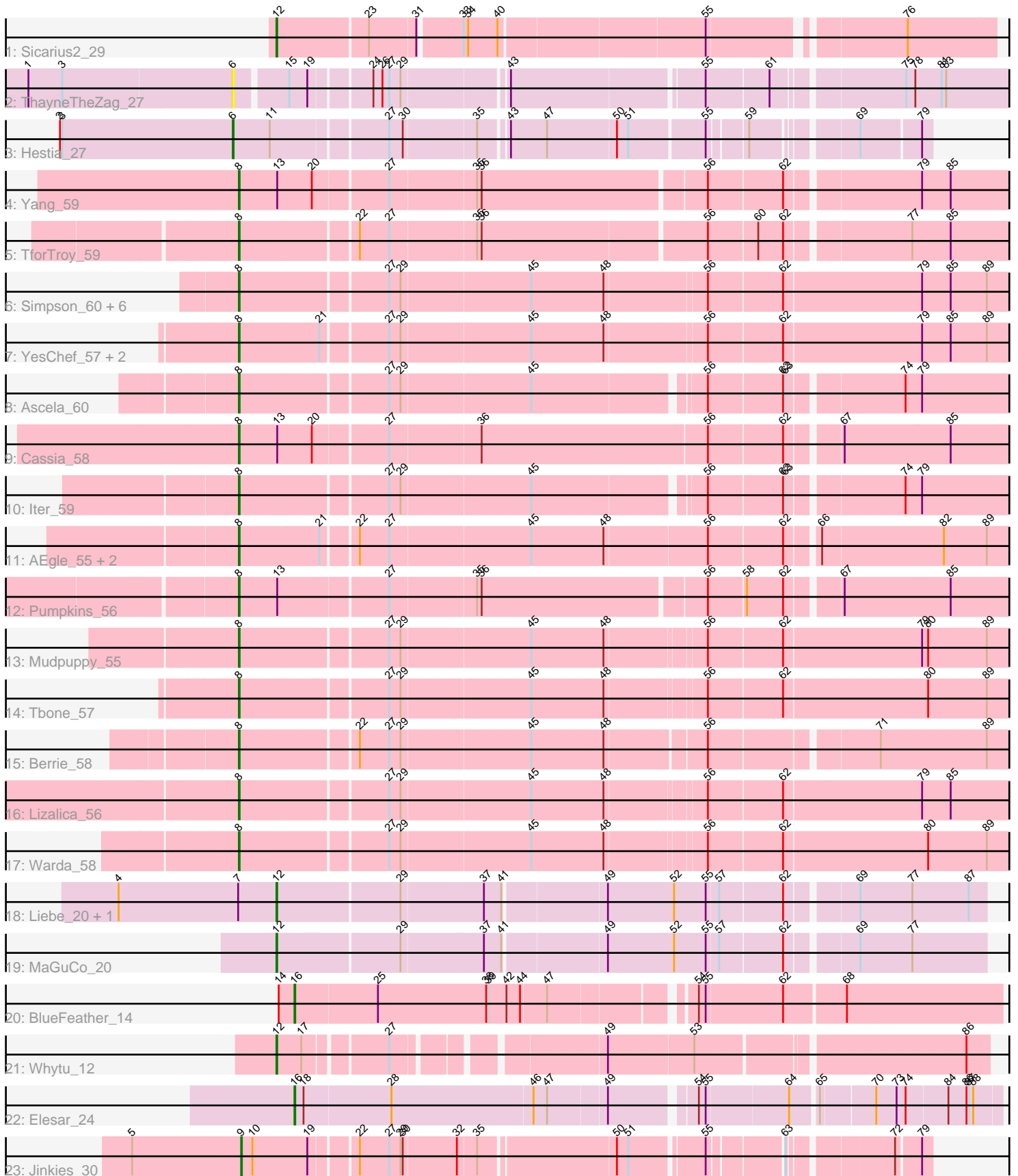


Pham 194212



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 194212 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194212 has 34 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Sicarius2_29
- Track 2 : ThayneTheZag_27
- Track 3 : Hestia_27
- Track 4 : Yang_59
- Track 5 : TforTroy_59
- Track 6 : Simpson_60, JohnDoe_58, Lego_57, Cyan_58, Kaylissa_59, Tutumahutu_59, Joemato_58
- Track 7 : YesChef_57, AGrandiflora_59, Powerpuff_59
- Track 8 : Ascela_60
- Track 9 : Cassia_58
- Track 10 : Iter_59
- Track 11 : AEgle_55, Adumb2043_56, Turab_56
- Track 12 : Pumpkins_56
- Track 13 : Mudpuppy_55
- Track 14 : Tbone_57
- Track 15 : Berrie_58
- Track 16 : Lizalica_56
- Track 17 : Warda_58
- Track 18 : Liebe_20, Maureen_20
- Track 19 : MaGuCo_20
- Track 20 : BlueFeather_14
- Track 21 : Whytu_12
- Track 22 : Elesar_24
- Track 23 : 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 8, it was called in 20 of the 29 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_58, Iter_59, Joemato_58, JohnDoe_58, Kaylissa_59, Lego_57, Lizalica_56, Mudpuppy_55, Powerpuff_59, Pumpkins_56, 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, Elesar_24, Hestia_27, Jinkies_30, Liebe_20, MaGuCo_20, Maureen_20, Sicarius2_29, ThayneTheZag_27, Whytu_12,

Summary by start number:

Start 6:

- Found in 2 of 34 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hestia_27 (AY), ThayneTheZag_27 (AY),

Start 8:

- Found in 24 of 34 (70.6%) of genes in pham
- Manual Annotations of this start: 20 of 29
- 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_58 (AZ1), Iter_59 (AZ1), Joemato_58 (AZ1), JohnDoe_58 (AZ1), Kaylissa_59 (AZ1), Lego_57 (AZ1), Lizalica_56 (AZ1), Mudpuppy_55 (AZ1), Powerpuff_59 (AZ1), Pumpkins_56 (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 9:

- Found in 1 of 34 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jinkies_30 (FL),

Start 12:

- Found in 5 of 34 (14.7%) of genes in pham
- Manual Annotations of this start: 5 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Liebe_20 (AZ2), MaGuCo_20 (AZ2), Maureen_20 (AZ2), Sicarius2_29 (AO2), Whytu_12 (FE),

Start 16:

- Found in 2 of 34 (5.9%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueFeather_14 (FE), Elesar_24 (FF),

Summary by clusters:

There are 7 clusters represented in this pham: FE, FF, AY, AZ1, AZ2, FL, AO2,

Info for manual annotations of cluster AO2:

- Start number 12 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AY:

- Start number 6 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster AZ1:

- Start number 8 was manually annotated 20 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 12 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster FE:

- Start number 12 was manually annotated 1 time for cluster FE.
- Start number 16 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster FF:

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

Info for manual annotations of cluster FL:

- Start number 9 was manually annotated 1 time for cluster FL.

Gene Information:

Gene: AEgle_55 Start: 38287, Stop: 39267, Start Num: 8

Candidate Starts for AEgle_55:

(Start: 8 @38287 has 20 MA's), (21, 38392), (22, 38434), (27, 38473), (45, 38656), (48, 38752), (56, 38884), (62, 38980), (66, 39016), (82, 39172), (89, 39229),

Gene: AGrandiflora_59 Start: 39228, Stop: 40220, Start Num: 8

Candidate Starts for AGrandiflora_59:

(Start: 8 @39228 has 20 MA's), (21, 39333), (27, 39414), (29, 39429), (45, 39597), (48, 39693), (56, 39822), (62, 39918), (79, 40098), (85, 40134), (89, 40182),

Gene: Adumb2043_56 Start: 38310, Stop: 39290, Start Num: 8

Candidate Starts for Adumb2043_56:

(Start: 8 @38310 has 20 MA's), (21, 38415), (22, 38457), (27, 38496), (45, 38679), (48, 38775), (56, 38907), (62, 39003), (66, 39039), (82, 39195), (89, 39252),

Gene: Ascela_60 Start: 39485, Stop: 40450, Start Num: 8

Candidate Starts for Ascela_60:

(Start: 8 @39485 has 20 MA's), (27, 39671), (29, 39686), (45, 39854), (56, 40064), (62, 40160), (63, 40163), (74, 40304), (79, 40325),

Gene: Berrie_58 Start: 39288, Stop: 40256, Start Num: 8

Candidate Starts for Berrie_58:

(Start: 8 @39288 has 20 MA's), (22, 39435), (27, 39474), (29, 39489), (45, 39657), (48, 39753), (56, 39876), (71, 40083), (89, 40221),

Gene: BlueFeather_14 Start: 10715, Stop: 11602, Start Num: 16

Candidate Starts for BlueFeather_14:

(14, 10694), (Start: 16 @10715 has 2 MA's), (25, 10823), (38, 10967), (39, 10970), (42, 10994), (44, 11012), (47, 11045), (54, 11213), (55, 11222), (62, 11321), (68, 11399),

Gene: Cassia_58 Start: 39217, Stop: 40194, Start Num: 8

Candidate Starts for Cassia_58:

(Start: 8 @39217 has 20 MA's), (13, 39268), (20, 39313), (27, 39406), (36, 39523), (56, 39814), (62, 39910), (67, 39973), (85, 40111),

Gene: Cyan_58 Start: 38971, Stop: 39963, Start Num: 8

Candidate Starts for Cyan_58:

(Start: 8 @38971 has 20 MA's), (27, 39157), (29, 39172), (45, 39340), (48, 39436), (56, 39565), (62, 39661), (79, 39841), (85, 39877), (89, 39925),

Gene: Elesar_24 Start: 18815, Stop: 19690, Start Num: 16

Candidate Starts for Elesar_24:

(Start: 16 @18815 has 2 MA's), (18, 18827), (28, 18941), (46, 19127), (47, 19145), (49, 19220), (54, 19322), (55, 19331), (64, 19433), (65, 19463), (70, 19529), (73, 19556), (74, 19568), (84, 19622), (86, 19646), (87, 19649), (88, 19655),

Gene: Hestia_27 Start: 19579, Stop: 20406, Start Num: 6

Candidate Starts for Hestia_27:

(2, 19351), (3, 19354), (Start: 6 @19579 has 1 MA's), (11, 19627), (27, 19768), (30, 19786), (35, 19879), (43, 19912), (47, 19960), (50, 20050), (51, 20065), (55, 20161), (59, 20206), (69, 20320), (79, 20395),

Gene: Iter_59 Start: 39256, Stop: 40221, Start Num: 8

Candidate Starts for Iter_59:

(Start: 8 @39256 has 20 MA's), (27, 39442), (29, 39457), (45, 39625), (56, 39835), (62, 39931), (63, 39934), (74, 40075), (79, 40096),

Gene: Jinkies_30 Start: 23927, Stop: 24739, Start Num: 9

Candidate Starts for Jinkies_30:

(5, 23789), (Start: 9 @23927 has 1 MA's), (10, 23942), (19, 24014), (22, 24068), (27, 24107), (29, 24122), (30, 24125), (32, 24194), (35, 24218), (50, 24389), (51, 24404), (55, 24494), (63, 24581), (72, 24698), (79, 24728),

Gene: Joemato_58 Start: 39052, Stop: 40044, Start Num: 8

Candidate Starts for Joemato_58:

(Start: 8 @39052 has 20 MA's), (27, 39238), (29, 39253), (45, 39421), (48, 39517), (56, 39646), (62, 39742), (79, 39922), (85, 39958), (89, 40006),

Gene: JohnDoe_58 Start: 39032, Stop: 40024, Start Num: 8

Candidate Starts for JohnDoe_58:

(Start: 8 @39032 has 20 MA's), (27, 39218), (29, 39233), (45, 39401), (48, 39497), (56, 39626), (62, 39722), (79, 39902), (85, 39938), (89, 39986),

Gene: Kaylissa_59 Start: 39430, Stop: 40422, Start Num: 8

Candidate Starts for Kaylissa_59:

(Start: 8 @39430 has 20 MA's), (27, 39616), (29, 39631), (45, 39799), (48, 39895), (56, 40024), (62, 40120), (79, 40300), (85, 40336), (89, 40384),

Gene: Lego_57 Start: 38749, Stop: 39741, Start Num: 8

Candidate Starts for Lego_57:

(Start: 8 @38749 has 20 MA's), (27, 38935), (29, 38950), (45, 39118), (48, 39214), (56, 39343), (62, 39439), (79, 39619), (85, 39655), (89, 39703),

Gene: Liebe_20 Start: 17855, Stop: 18736, Start Num: 12

Candidate Starts for Liebe_20:

(4, 17645), (7, 17804), (Start: 12 @17855 has 5 MA's), (29, 18011), (37, 18116), (41, 18137), (49, 18266), (52, 18353), (55, 18392), (57, 18407), (62, 18488), (69, 18572), (77, 18641), (87, 18713),

Gene: Lizalica_56 Start: 38292, Stop: 39275, Start Num: 8

Candidate Starts for Lizalica_56:

(Start: 8 @38292 has 20 MA's), (27, 38478), (29, 38493), (45, 38661), (48, 38757), (56, 38880), (62, 38976), (79, 39156), (85, 39192),

Gene: MaGuCo_20 Start: 17788, Stop: 18669, Start Num: 12

Candidate Starts for MaGuCo_20:

(Start: 12 @17788 has 5 MA's), (29, 17944), (37, 18049), (41, 18070), (49, 18199), (52, 18286), (55, 18325), (57, 18340), (62, 18421), (69, 18505), (77, 18574),

Gene: Maureen_20 Start: 17855, Stop: 18736, Start Num: 12

Candidate Starts for Maureen_20:

(4, 17645), (7, 17804), (Start: 12 @17855 has 5 MA's), (29, 18011), (37, 18116), (41, 18137), (49, 18266), (52, 18353), (55, 18392), (57, 18407), (62, 18488), (69, 18572), (77, 18641), (87, 18713),

Gene: Mudpuppy_55 Start: 38904, Stop: 39890, Start Num: 8

Candidate Starts for Mudpuppy_55:

(Start: 8 @38904 has 20 MA's), (27, 39090), (29, 39105), (45, 39273), (48, 39369), (56, 39492), (62, 39588), (79, 39768), (80, 39774), (89, 39852),

Gene: Powerpuff_59 Start: 39951, Stop: 40943, Start Num: 8

Candidate Starts for Powerpuff_59:

(Start: 8 @39951 has 20 MA's), (21, 40056), (27, 40137), (29, 40152), (45, 40320), (48, 40416), (56, 40545), (62, 40641), (79, 40821), (85, 40857), (89, 40905),

Gene: Pumpkins_56 Start: 39599, Stop: 40567, Start Num: 8

Candidate Starts for Pumpkins_56:

(Start: 8 @39599 has 20 MA's), (13, 39650), (27, 39788), (35, 39899), (36, 39905), (56, 40187), (58, 40235), (62, 40283), (67, 40346), (85, 40484),

Gene: Sicarius2_29 Start: 24015, Stop: 24896, Start Num: 12

Candidate Starts for Sicarius2_29:

(Start: 12 @24015 has 5 MA's), (23, 24129), (31, 24189), (33, 24243), (34, 24249), (40, 24288), (55, 24549), (76, 24783),

Gene: Simpson_60 Start: 39056, Stop: 40048, Start Num: 8

Candidate Starts for Simpson_60:

(Start: 8 @39056 has 20 MA's), (27, 39242), (29, 39257), (45, 39425), (48, 39521), (56, 39650), (62, 39746), (79, 39926), (85, 39962), (89, 40010),

Gene: Tbone_57 Start: 39387, Stop: 40373, Start Num: 8

Candidate Starts for Tbone_57:

(Start: 8 @39387 has 20 MA's), (27, 39573), (29, 39588), (45, 39756), (48, 39852), (56, 39975), (62, 40071), (80, 40257), (89, 40335),

Gene: TforTroy_59 Start: 39527, Stop: 40492, Start Num: 8

Candidate Starts for TforTroy_59:

(Start: 8 @39527 has 20 MA's), (22, 39674), (27, 39713), (35, 39824), (36, 39830), (56, 40112), (60, 40175), (62, 40208), (77, 40361), (85, 40409),

Gene: ThayneTheZag_27 Start: 19570, Stop: 20526, Start Num: 6

Candidate Starts for ThayneTheZag_27:

(1, 19303), (3, 19348), (Start: 6 @19570 has 1 MA's), (15, 19633), (19, 19657), (24, 19729), (26, 19741), (27, 19750), (29, 19765), (43, 19894), (55, 20137), (61, 20218), (75, 20377), (78, 20389), (81, 20422), (83, 20428),

Gene: Turab_56 Start: 38331, Stop: 39311, Start Num: 8

Candidate Starts for Turab_56:

(Start: 8 @38331 has 20 MA's), (21, 38436), (22, 38478), (27, 38517), (45, 38700), (48, 38796), (56, 38928), (62, 39024), (66, 39060), (82, 39216), (89, 39273),

Gene: Tutumahutu_59 Start: 39023, Stop: 40015, Start Num: 8

Candidate Starts for Tutumahutu_59:

(Start: 8 @39023 has 20 MA's), (27, 39209), (29, 39224), (45, 39392), (48, 39488), (56, 39617), (62, 39713), (79, 39893), (85, 39929), (89, 39977),

Gene: Warda_58 Start: 39113, Stop: 40099, Start Num: 8

Candidate Starts for Warda_58:

(Start: 8 @39113 has 20 MA's), (27, 39299), (29, 39314), (45, 39482), (48, 39578), (56, 39701), (62, 39797), (80, 39983), (89, 40061),

Gene: Whytu_12 Start: 10993, Stop: 11844, Start Num: 12

Candidate Starts for Whytu_12:

(Start: 12 @10993 has 5 MA's), (17, 11026), (27, 11125), (49, 11371), (53, 11482), (86, 11815),

Gene: Yang_59 Start: 39529, Stop: 40497, Start Num: 8

Candidate Starts for Yang_59:

(Start: 8 @39529 has 20 MA's), (13, 39580), (20, 39625), (27, 39718), (35, 39829), (36, 39835), (56, 40117), (62, 40213), (79, 40378), (85, 40414),

Gene: YesChef_57 Start: 38810, Stop: 39802, Start Num: 8

Candidate Starts for YesChef_57:

(Start: 8 @38810 has 20 MA's), (21, 38915), (27, 38996), (29, 39011), (45, 39179), (48, 39275), (56, 39404), (62, 39500), (79, 39680), (85, 39716), (89, 39764),