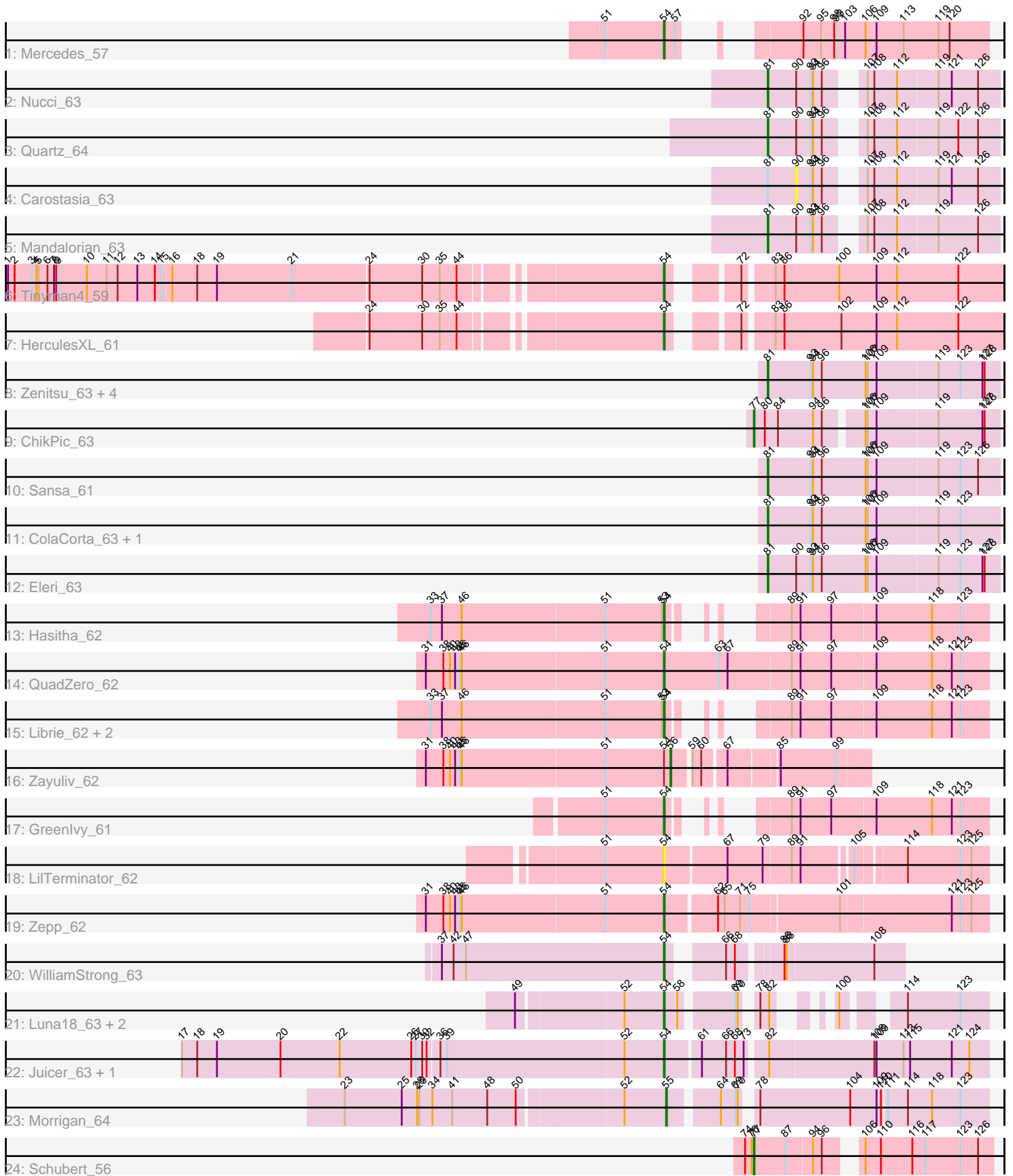


Pham 170179



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 170179 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170179 has 34 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_57
- Track 2 : Nucci_63
- Track 3 : Quartz_64
- Track 4 : Carostasia_63
- Track 5 : Mandalorian_63
- Track 6 : Tinyman4_59
- Track 7 : HerculesXL_61
- Track 8 : Zenitsu_63, MCubed_63, Saratos_63, Shamu_63, Glamour_62
- Track 9 : ChikPic_63
- Track 10 : Sansa_61
- Track 11 : ColaCorta_63, Andromedas_63
- Track 12 : Eleri_63
- Track 13 : Hasitha_62
- Track 14 : QuadZero_62
- Track 15 : Librie_62, CaptainRex_62, Fulton_62
- Track 16 : Zayuliv_62
- Track 17 : Greenlvy_61
- Track 18 : LilTerminator_62
- Track 19 : Zepp_62
- Track 20 : WilliamStrong_63
- Track 21 : Luna18_63, KatChan_62, Chepli_63
- Track 22 : Juicer_63, Jemerald_63
- Track 23 : Morigan_64
- Track 24 : Schubert_56

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

The start number called the most often in the published annotations is 54, it was called in 15 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CaptainRex_62, Chepli_63, Fulton_62, Greenlvy_61, Hasitha_62, HerculesXL_61, Jemerald_63, Juicer_63, KatChan_62, Librie_62, LilTerminator_62, Luna18_63, Mercedes_57, QuadZero_62, Tinyman4_59, WilliamStrong_63, Zepp_62,

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

- Zayuliv_62,

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

- Andromedas_63, Carostasia_63, ChikPic_63, ColaCorta_63, Eleri_63, Glamour_62, MCubed_63, Mandalorian_63, Morrigan_64, Nucci_63, Quartz_64, Sansa_61, Saratos_63, Schubert_56, Shamu_63, Zenitsu_63,

Summary by start number:

Start 54:

- Found in 18 of 34 (52.9%) of genes in pham
- Manual Annotations of this start: 15 of 31
- Called 94.4% of time when present
- Phage (with cluster) where this start called: CaptainRex_62 (EA5), Chepli_63 (EA6), Fulton_62 (EA5), Greenlvy_61 (EA5), Hasitha_62 (EA5), HerculesXL_61 (EA11), Jemerald_63 (EA6), Juicer_63 (EA6), KatChan_62 (EA6), Librie_62 (EA5), LilTerminator_62 (EA5), Luna18_63 (EA6), Mercedes_57 (EA), QuadZero_62 (EA5), Tinyman4_59 (EA11), WilliamStrong_63 (EA6), Zepp_62 (EA5),

Start 55:

- Found in 1 of 34 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrigan_64 (EA6),

Start 56:

- Found in 1 of 34 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zayuliv_62 (EA5),

Start 77:

- Found in 2 of 34 (5.9%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChikPic_63 (EA2), Schubert_56 (EA8),

Start 81:

- Found in 13 of 34 (38.2%) of genes in pham
- Manual Annotations of this start: 12 of 31
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Andromedas_63 (EA2), ColaCorta_63 (EA2), Eleri_63 (EA2), Glamour_62 (EA2), MCubed_63 (EA2), Mandalorian_63 (EA10), Nucci_63 (EA10), Quartz_64 (EA10), Sansa_61 (EA2), Saratos_63 (EA2), Shamu_63 (EA2), Zenitsu_63 (EA2),

Start 90:

- Found in 5 of 34 (14.7%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Carostasia_63 (EA10),

Summary by clusters:

There are 7 clusters represented in this pham: EA11, EA10, EA, EA8, EA2, EA5, EA6,

Info for manual annotations of cluster EA:

- Start number 54 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA10:

- Start number 81 was manually annotated 3 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 54 was manually annotated 2 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 77 was manually annotated 1 time for cluster EA2.
- Start number 81 was manually annotated 9 times for cluster EA2.

Info for manual annotations of cluster EA5:

- Start number 54 was manually annotated 6 times for cluster EA5.
- Start number 56 was manually annotated 1 time for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 54 was manually annotated 6 times for cluster EA6.
- Start number 55 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 77 was manually annotated 1 time for cluster EA8.

Gene Information:

Gene: Andromedas_63 Start: 39976, Stop: 40287, Start Num: 81

Candidate Starts for Andromedas_63:

(Start: 81 @39976 has 12 MA's), (93, 40033), (94, 40036), (96, 40048), (106, 40108), (107, 40111), (109, 40123), (119, 40204), (123, 40234),

Gene: CaptainRex_62 Start: 39228, Stop: 39563, Start Num: 54

Candidate Starts for CaptainRex_62:

(33, 38916), (37, 38931), (46, 38958), (51, 39147), (53, 39225), (Start: 54 @39228 has 15 MA's), (89, 39300), (91, 39312), (97, 39354), (109, 39411), (118, 39486), (121, 39513), (123, 39525),

Gene: Carostasia_63 Start: 40062, Stop: 40301, Start Num: 90

Candidate Starts for Carostasia_63:

(Start: 81 @40023 has 12 MA's), (90, 40062), (93, 40080), (94, 40083), (96, 40095), (107, 40125), (108, 40134), (112, 40164), (119, 40218), (121, 40236), (126, 40272),

Gene: Chepli_63 Start: 39731, Stop: 40042, Start Num: 54

Candidate Starts for Chepli_63:

(49, 39542), (52, 39677), (Start: 54 @39731 has 15 MA's), (58, 39746), (69, 39809), (70, 39812), (78, 39824), (82, 39836), (100, 39872), (114, 39932), (123, 40004),

Gene: ChikPic_63 Start: 39809, Stop: 40126, Start Num: 77

Candidate Starts for ChikPic_63:

(Start: 77 @39809 has 2 MA's), (80, 39824), (84, 39842), (94, 39890), (96, 39902), (106, 39947), (107, 39950), (109, 39962), (119, 40043), (127, 40103), (128, 40106),

Gene: ColaCorta_63 Start: 39976, Stop: 40287, Start Num: 81

Candidate Starts for ColaCorta_63:

(Start: 81 @39976 has 12 MA's), (93, 40033), (94, 40036), (96, 40048), (106, 40108), (107, 40111), (109, 40123), (119, 40204), (123, 40234),

Gene: Eleri_63 Start: 39848, Stop: 40159, Start Num: 81

Candidate Starts for Eleri_63:

(Start: 81 @39848 has 12 MA's), (90, 39887), (93, 39905), (94, 39908), (96, 39920), (106, 39980), (107, 39983), (109, 39995), (119, 40076), (123, 40106), (127, 40136), (128, 40139),

Gene: Fulton_62 Start: 39229, Stop: 39564, Start Num: 54

Candidate Starts for Fulton_62:

(33, 38917), (37, 38932), (46, 38959), (51, 39148), (53, 39226), (Start: 54 @39229 has 15 MA's), (89, 39301), (91, 39313), (97, 39355), (109, 39412), (118, 39487), (121, 39514), (123, 39526),

Gene: Glamour_62 Start: 39706, Stop: 40017, Start Num: 81

Candidate Starts for Glamour_62:

(Start: 81 @39706 has 12 MA's), (93, 39763), (94, 39766), (96, 39778), (106, 39838), (107, 39841), (109, 39853), (119, 39934), (123, 39964), (127, 39994), (128, 39997),

Gene: Greenlvy_61 Start: 39603, Stop: 39938, Start Num: 54

Candidate Starts for Greenlvy_61:

(51, 39522), (Start: 54 @39603 has 15 MA's), (89, 39675), (91, 39687), (97, 39729), (109, 39786), (118, 39861), (121, 39888), (123, 39900),

Gene: Hasitha_62 Start: 39239, Stop: 39574, Start Num: 54

Candidate Starts for Hasitha_62:

(33, 38927), (37, 38942), (46, 38969), (51, 39158), (53, 39236), (Start: 54 @39239 has 15 MA's), (89, 39311), (91, 39323), (97, 39365), (109, 39422), (118, 39497), (123, 39536),

Gene: HerculesXL_61 Start: 38678, Stop: 39088, Start Num: 54

Candidate Starts for HerculesXL_61:

(24, 38312), (30, 38384), (35, 38408), (44, 38429), (Start: 54 @38678 has 15 MA's), (72, 38744), (83, 38777), (86, 38789), (102, 38867), (109, 38915), (112, 38942), (122, 39026),

Gene: Jemerald_63 Start: 40506, Stop: 40928, Start Num: 54

Candidate Starts for Jemerald_63:

(17, 39861), (18, 39882), (19, 39909), (20, 39996), (22, 40077), (26, 40173), (27, 40179), (30, 40188), (32, 40194), (36, 40209), (39, 40218), (52, 40452), (Start: 54 @40506 has 15 MA's), (61, 40551), (66, 40584), (68, 40596), (73, 40608), (82, 40632), (108, 40773), (109, 40776), (113, 40812), (115, 40821), (121, 40878), (124, 40902),

Gene: Juicer_63 Start: 40506, Stop: 40928, Start Num: 54

Candidate Starts for Juicer_63:

(17, 39861), (18, 39882), (19, 39909), (20, 39996), (22, 40077), (26, 40173), (27, 40179), (30, 40188), (32, 40194), (36, 40209), (39, 40218), (52, 40452), (Start: 54 @40506 has 15 MA's), (61, 40551), (66, 40584), (68, 40596), (73, 40608), (82, 40632), (108, 40773), (109, 40776), (113, 40812), (115, 40821),

(121, 40878), (124, 40902),

Gene: KatChan_62 Start: 39748, Stop: 40059, Start Num: 54

Candidate Starts for KatChan_62:

(49, 39559), (52, 39694), (Start: 54 @39748 has 15 MA's), (58, 39763), (69, 39826), (70, 39829), (78, 39841), (82, 39853), (100, 39889), (114, 39949), (123, 40021),

Gene: Librie_62 Start: 39228, Stop: 39563, Start Num: 54

Candidate Starts for Librie_62:

(33, 38916), (37, 38931), (46, 38958), (51, 39147), (53, 39225), (Start: 54 @39228 has 15 MA's), (89, 39300), (91, 39312), (97, 39354), (109, 39411), (118, 39486), (121, 39513), (123, 39525),

Gene: LilTerminator_62 Start: 39240, Stop: 39647, Start Num: 54

Candidate Starts for LilTerminator_62:

(51, 39159), (Start: 54 @39240 has 15 MA's), (67, 39321), (79, 39369), (89, 39405), (91, 39417), (105, 39477), (114, 39537), (123, 39609), (125, 39624),

Gene: Luna18_63 Start: 39748, Stop: 40059, Start Num: 54

Candidate Starts for Luna18_63:

(49, 39559), (52, 39694), (Start: 54 @39748 has 15 MA's), (58, 39763), (69, 39826), (70, 39829), (78, 39841), (82, 39853), (100, 39889), (114, 39949), (123, 40021),

Gene: MCubed_63 Start: 39863, Stop: 40174, Start Num: 81

Candidate Starts for MCubed_63:

(Start: 81 @39863 has 12 MA's), (93, 39920), (94, 39923), (96, 39935), (106, 39995), (107, 39998), (109, 40010), (119, 40091), (123, 40121), (127, 40151), (128, 40154),

Gene: Mandalorian_63 Start: 40034, Stop: 40312, Start Num: 81

Candidate Starts for Mandalorian_63:

(Start: 81 @40034 has 12 MA's), (90, 40073), (93, 40091), (94, 40094), (96, 40106), (107, 40136), (108, 40145), (112, 40175), (119, 40229), (126, 40283),

Gene: Mercedes_57 Start: 39485, Stop: 39826, Start Num: 54

Candidate Starts for Mercedes_57:

(51, 39404), (Start: 54 @39485 has 15 MA's), (57, 39500), (92, 39575), (95, 39599), (98, 39617), (99, 39620), (103, 39632), (106, 39659), (109, 39674), (113, 39710), (119, 39758), (120, 39773),

Gene: Morrigan_64 Start: 39803, Stop: 40204, Start Num: 55

Candidate Starts for Morrigan_64:

(23, 39377), (25, 39455), (28, 39476), (29, 39479), (34, 39497), (41, 39524), (48, 39572), (50, 39611), (52, 39746), (Start: 55 @39803 has 1 MA's), (64, 39863), (69, 39881), (70, 39884), (78, 39896), (104, 40019), (109, 40055), (110, 40061), (111, 40067), (114, 40094), (118, 40127), (123, 40166),

Gene: Nucci_63 Start: 40003, Stop: 40281, Start Num: 81

Candidate Starts for Nucci_63:

(Start: 81 @40003 has 12 MA's), (90, 40042), (93, 40060), (94, 40063), (96, 40075), (107, 40105), (108, 40114), (112, 40144), (119, 40198), (121, 40216), (126, 40252),

Gene: QuadZero_62 Start: 39331, Stop: 39765, Start Num: 54

Candidate Starts for QuadZero_62:

(31, 39013), (38, 39037), (40, 39046), (43, 39052), (45, 39058), (46, 39061), (51, 39250), (Start: 54 @39331 has 15 MA's), (63, 39406), (67, 39418), (89, 39502), (91, 39514), (97, 39556), (109, 39613), (118, 39688), (121, 39715), (123, 39727),

Gene: Quartz_64 Start: 40147, Stop: 40425, Start Num: 81

Candidate Starts for Quartz_64:

(Start: 81 @40147 has 12 MA's), (90, 40186), (93, 40204), (94, 40207), (96, 40219), (107, 40249), (108, 40258), (112, 40288), (119, 40342), (122, 40369), (126, 40396),

Gene: Sansa_61 Start: 39788, Stop: 40099, Start Num: 81

Candidate Starts for Sansa_61:

(Start: 81 @39788 has 12 MA's), (93, 39845), (94, 39848), (96, 39860), (106, 39920), (107, 39923), (109, 39935), (119, 40016), (123, 40046), (126, 40070),

Gene: Saratos_63 Start: 39832, Stop: 40143, Start Num: 81

Candidate Starts for Saratos_63:

(Start: 81 @39832 has 12 MA's), (93, 39889), (94, 39892), (96, 39904), (106, 39964), (107, 39967), (109, 39979), (119, 40060), (123, 40090), (127, 40120), (128, 40123),

Gene: Schubert_56 Start: 38451, Stop: 38738, Start Num: 77

Candidate Starts for Schubert_56:

(74, 38439), (76, 38448), (Start: 77 @38451 has 2 MA's), (87, 38493), (94, 38526), (96, 38538), (106, 38568), (110, 38589), (116, 38631), (117, 38649), (123, 38697), (126, 38721),

Gene: Shamu_63 Start: 39721, Stop: 40032, Start Num: 81

Candidate Starts for Shamu_63:

(Start: 81 @39721 has 12 MA's), (93, 39778), (94, 39781), (96, 39793), (106, 39853), (107, 39856), (109, 39868), (119, 39949), (123, 39979), (127, 40009), (128, 40012),

Gene: Tinyman4_59 Start: 38673, Stop: 39083, Start Num: 54

Candidate Starts for Tinyman4_59:

(1, 37818), (2, 37827), (3, 37851), (4, 37857), (5, 37860), (6, 37872), (7, 37881), (8, 37884), (9, 37887), (10, 37926), (11, 37953), (12, 37968), (13, 37995), (14, 38019), (15, 38028), (16, 38043), (18, 38076), (19, 38103), (21, 38205), (24, 38307), (30, 38379), (35, 38403), (44, 38424), (Start: 54 @38673 has 15 MA's), (72, 38739), (83, 38772), (86, 38784), (100, 38859), (109, 38910), (112, 38937), (122, 39021),

Gene: WilliamStrong_63 Start: 40172, Stop: 40447, Start Num: 54

Candidate Starts for WilliamStrong_63:

(37, 39875), (42, 39890), (47, 39905), (Start: 54 @40172 has 15 MA's), (66, 40229), (68, 40241), (86, 40292), (88, 40295), (108, 40406),

Gene: Zayuliv_62 Start: 39911, Stop: 40141, Start Num: 56

Candidate Starts for Zayuliv_62:

(31, 39584), (38, 39608), (40, 39617), (43, 39623), (45, 39629), (46, 39632), (51, 39821), (Start: 54 @39902 has 15 MA's), (Start: 56 @39911 has 1 MA's), (59, 39932), (60, 39944), (67, 39971), (85, 40031), (99, 40103),

Gene: Zenitsu_63 Start: 39868, Stop: 40179, Start Num: 81

Candidate Starts for Zenitsu_63:

(Start: 81 @39868 has 12 MA's), (93, 39925), (94, 39928), (96, 39940), (106, 40000), (107, 40003), (109, 40015), (119, 40096), (123, 40126), (127, 40156), (128, 40159),

Gene: Zepp_62 Start: 39460, Stop: 39873, Start Num: 54

Candidate Starts for Zepp_62:

(31, 39142), (38, 39166), (40, 39175), (43, 39181), (45, 39187), (46, 39190), (51, 39379), (Start: 54
@39460 has 15 MA's), (62, 39526), (65, 39535), (71, 39556), (75, 39568), (101, 39679), (121, 39823),
(123, 39835), (125, 39850),