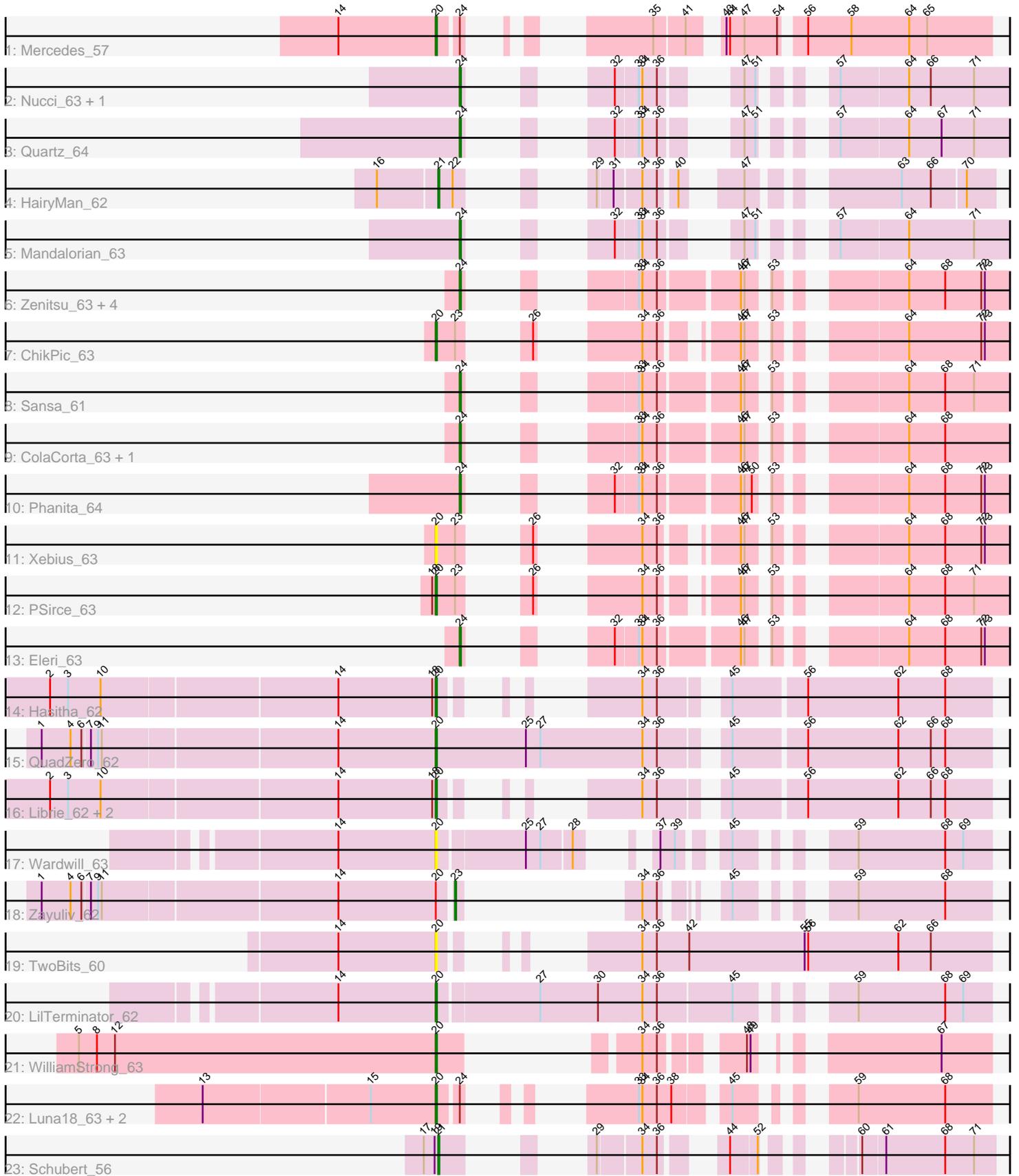


Pham 289612



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 289612 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289612 has 33 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_57
- Track 2 : Nucci_63, Carostasia_63
- Track 3 : Quartz_64
- Track 4 : HairyMan_62
- Track 5 : Mandalorian_63
- Track 6 : Zenitsu_63, MCubed_63, Saratos_63, Shamu_63, Glamour_62
- Track 7 : ChikPic_63
- Track 8 : Sansa_61
- Track 9 : ColaCorta_63, Andromedas_63
- Track 10 : Phanita_64
- Track 11 : Xebius_63
- Track 12 : PSirce_63
- Track 13 : Eleri_63
- Track 14 : Hasitha_62
- Track 15 : QuadZero_62
- Track 16 : Librie_62, CaptainRex_62, Fulton_62
- Track 17 : Wardwill_63
- Track 18 : Zayuliv_62
- Track 19 : TwoBits_60
- Track 20 : LilTerminator_62
- Track 21 : WilliamStrong_63
- Track 22 : Luna18_63, KatChan_62, Chepli_63
- Track 23 : 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 24, it was called in 14 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Andromedas_63, Carostasia_63, ColaCorta_63, Eleri_63, Glamour_62, MCubed_63, Mandalorian_63, Nucci_63, Phanita_64, Quartz_64, Sansa_61, Saratos_63, Shamu_63, Zenitsu_63,

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

- Chepli_63, KatChan_62, Luna18_63, Mercedes_57,

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

- CaptainRex_62, ChikPic_63, Fulton_62, HairyMan_62, Hasitha_62, Librie_62, LilTerminator_62, PSirce_63, QuadZero_62, Schubert_56, TwoBits_60, Wardwill_63, WilliamStrong_63, Xebius_63, Zayuliv_62,

Summary by start number:

Start 20:

- Found in 17 of 33 (51.5%) of genes in pham
- Manual Annotations of this start: 13 of 30
- Called 94.1% of time when present
- Phage (with cluster) where this start called: CaptainRex_62 (EA5), Chepli_63 (EA6), ChikPic_63 (EA2), Fulton_62 (EA5), Hasitha_62 (EA5), KatChan_62 (EA6), Librie_62 (EA5), LilTerminator_62 (EA5), Luna18_63 (EA6), Mercedes_57 (EA), PSirce_63 (EA2), QuadZero_62 (EA5), TwoBits_60 (EA5), Wardwill_63 (EA5), WilliamStrong_63 (EA6), Xebius_63 (EA2),

Start 21:

- Found in 2 of 33 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HairyMan_62 (EA10), Schubert_56 (EA8),

Start 23:

- Found in 4 of 33 (12.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Zayuliv_62 (EA5),

Start 24:

- Found in 18 of 33 (54.5%) of genes in pham
- Manual Annotations of this start: 14 of 30
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Andromedas_63 (EA2), Carostasia_63 (EA10), ColaCorta_63 (EA2), Eleri_63 (EA2), Glamour_62 (EA2), MCubed_63 (EA2), Mandalorian_63 (EA10), Nucci_63 (EA10), Phanita_64 (EA2), Quartz_64 (EA10), Sansa_61 (EA2), Saratos_63 (EA2), Shamu_63 (EA2), Zenitsu_63 (EA2),

Summary by clusters:

There are 6 clusters represented in this pham: EA10, EA, EA8, EA2, EA5, EA6,

Info for manual annotations of cluster EA:

- Start number 20 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA10:

- Start number 21 was manually annotated 1 time for cluster EA10.
- Start number 24 was manually annotated 4 times for cluster EA10.

Info for manual annotations of cluster EA2:

- Start number 20 was manually annotated 2 times for cluster EA2.
- Start number 24 was manually annotated 10 times for cluster EA2.

Info for manual annotations of cluster EA5:

- Start number 20 was manually annotated 6 times for cluster EA5.
- Start number 23 was manually annotated 1 time for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 20 was manually annotated 4 times for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 21 was manually annotated 1 time for cluster EA8.

Gene Information:

Gene: Andromedas_63 Start: 39976, Stop: 40287, Start Num: 24

Candidate Starts for Andromedas_63:

(Start: 24 @39976 has 14 MA's), (33, 40033), (34, 40036), (36, 40048), (46, 40108), (47, 40111), (53, 40123), (64, 40204), (68, 40234),

Gene: CaptainRex_62 Start: 39228, Stop: 39563, Start Num: 20

Candidate Starts for CaptainRex_62:

(2, 38916), (3, 38931), (10, 38958), (14, 39147), (18, 39225), (Start: 20 @39228 has 13 MA's), (34, 39300), (36, 39312), (45, 39354), (56, 39411), (62, 39486), (66, 39513), (68, 39525),

Gene: Carostasia_63 Start: 40023, Stop: 40301, Start Num: 24

Candidate Starts for Carostasia_63:

(Start: 24 @40023 has 14 MA's), (32, 40062), (33, 40080), (34, 40083), (36, 40095), (47, 40125), (51, 40134), (57, 40164), (64, 40218), (66, 40236), (71, 40272),

Gene: Chepli_63 Start: 39731, Stop: 40042, Start Num: 20

Candidate Starts for Chepli_63:

(13, 39542), (15, 39677), (Start: 20 @39731 has 13 MA's), (Start: 24 @39746 has 14 MA's), (33, 39809), (34, 39812), (36, 39824), (38, 39836), (45, 39872), (59, 39932), (68, 40004),

Gene: ChikPic_63 Start: 39809, Stop: 40126, Start Num: 20

Candidate Starts for ChikPic_63:

(Start: 20 @39809 has 13 MA's), (Start: 23 @39824 has 1 MA's), (26, 39842), (34, 39890), (36, 39902), (46, 39947), (47, 39950), (53, 39962), (64, 40043), (72, 40103), (73, 40106),

Gene: ColaCorta_63 Start: 39976, Stop: 40287, Start Num: 24

Candidate Starts for ColaCorta_63:

(Start: 24 @39976 has 14 MA's), (33, 40033), (34, 40036), (36, 40048), (46, 40108), (47, 40111), (53, 40123), (64, 40204), (68, 40234),

Gene: Eleri_63 Start: 39848, Stop: 40159, Start Num: 24

Candidate Starts for Eleri_63:

(Start: 24 @39848 has 14 MA's), (32, 39887), (33, 39905), (34, 39908), (36, 39920), (46, 39980), (47, 39983), (53, 39995), (64, 40076), (68, 40106), (72, 40136), (73, 40139),

Gene: Fulton_62 Start: 39229, Stop: 39564, Start Num: 20

Candidate Starts for Fulton_62:

(2, 38917), (3, 38932), (10, 38959), (14, 39148), (18, 39226), (Start: 20 @39229 has 13 MA's), (34, 39301), (36, 39313), (45, 39355), (56, 39412), (62, 39487), (66, 39514), (68, 39526),

Gene: Glamour_62 Start: 39706, Stop: 40017, Start Num: 24

Candidate Starts for Glamour_62:

(Start: 24 @39706 has 14 MA's), (33, 39763), (34, 39766), (36, 39778), (46, 39838), (47, 39841), (53, 39853), (64, 39934), (68, 39964), (72, 39994), (73, 39997),

Gene: HairyMan_62 Start: 40887, Stop: 41183, Start Num: 21

Candidate Starts for HairyMan_62:

(16, 40839), (Start: 21 @40887 has 2 MA's), (22, 40899), (29, 40929), (31, 40941), (34, 40962), (36, 40974), (40, 40986), (47, 41016), (63, 41109), (66, 41133), (70, 41160),

Gene: Hasitha_62 Start: 39239, Stop: 39574, Start Num: 20

Candidate Starts for Hasitha_62:

(2, 38927), (3, 38942), (10, 38969), (14, 39158), (18, 39236), (Start: 20 @39239 has 13 MA's), (34, 39311), (36, 39323), (45, 39365), (56, 39422), (62, 39497), (68, 39536),

Gene: KatChan_62 Start: 39748, Stop: 40059, Start Num: 20

Candidate Starts for KatChan_62:

(13, 39559), (15, 39694), (Start: 20 @39748 has 13 MA's), (Start: 24 @39763 has 14 MA's), (33, 39826), (34, 39829), (36, 39841), (38, 39853), (45, 39889), (59, 39949), (68, 40021),

Gene: Librie_62 Start: 39228, Stop: 39563, Start Num: 20

Candidate Starts for Librie_62:

(2, 38916), (3, 38931), (10, 38958), (14, 39147), (18, 39225), (Start: 20 @39228 has 13 MA's), (34, 39300), (36, 39312), (45, 39354), (56, 39411), (62, 39486), (66, 39513), (68, 39525),

Gene: LilTerminator_62 Start: 39240, Stop: 39647, Start Num: 20

Candidate Starts for LilTerminator_62:

(14, 39159), (Start: 20 @39240 has 13 MA's), (27, 39321), (30, 39369), (34, 39405), (36, 39417), (45, 39477), (59, 39537), (68, 39609), (69, 39624),

Gene: Luna18_63 Start: 39748, Stop: 40059, Start Num: 20

Candidate Starts for Luna18_63:

(13, 39559), (15, 39694), (Start: 20 @39748 has 13 MA's), (Start: 24 @39763 has 14 MA's), (33, 39826), (34, 39829), (36, 39841), (38, 39853), (45, 39889), (59, 39949), (68, 40021),

Gene: MCubed_63 Start: 39863, Stop: 40174, Start Num: 24

Candidate Starts for MCubed_63:

(Start: 24 @39863 has 14 MA's), (33, 39920), (34, 39923), (36, 39935), (46, 39995), (47, 39998), (53, 40010), (64, 40091), (68, 40121), (72, 40151), (73, 40154),

Gene: Mandalorian_63 Start: 40034, Stop: 40312, Start Num: 24

Candidate Starts for Mandalorian_63:

(Start: 24 @40034 has 14 MA's), (32, 40073), (33, 40091), (34, 40094), (36, 40106), (47, 40136), (51, 40145), (57, 40175), (64, 40229), (71, 40283),

Gene: Mercedes_57 Start: 39485, Stop: 39826, Start Num: 20

Candidate Starts for Mercedes_57:

(14, 39404), (Start: 20 @39485 has 13 MA's), (Start: 24 @39500 has 14 MA's), (35, 39575), (41, 39599), (43, 39617), (44, 39620), (47, 39632), (54, 39659), (56, 39674), (58, 39710), (64, 39758), (65, 39773),

Gene: Nucci_63 Start: 40003, Stop: 40281, Start Num: 24

Candidate Starts for Nucci_63:

(Start: 24 @40003 has 14 MA's), (32, 40042), (33, 40060), (34, 40063), (36, 40075), (47, 40105), (51, 40114), (57, 40144), (64, 40198), (66, 40216), (71, 40252),

Gene: PSirce_63 Start: 40001, Stop: 40318, Start Num: 20

Candidate Starts for PSirce_63:

(18, 39998), (Start: 20 @40001 has 13 MA's), (Start: 23 @40016 has 1 MA's), (26, 40034), (34, 40082), (36, 40094), (46, 40139), (47, 40142), (53, 40154), (64, 40235), (68, 40265), (71, 40289),

Gene: Phanita_64 Start: 39773, Stop: 40084, Start Num: 24

Candidate Starts for Phanita_64:

(Start: 24 @39773 has 14 MA's), (32, 39812), (33, 39830), (34, 39833), (36, 39845), (46, 39905), (47, 39908), (50, 39914), (53, 39920), (64, 40001), (68, 40031), (72, 40061), (73, 40064),

Gene: QuadZero_62 Start: 39331, Stop: 39765, Start Num: 20

Candidate Starts for QuadZero_62:

(1, 39013), (4, 39037), (6, 39046), (7, 39052), (9, 39058), (11, 39061), (14, 39250), (Start: 20 @39331 has 13 MA's), (25, 39406), (27, 39418), (34, 39502), (36, 39514), (45, 39556), (56, 39613), (62, 39688), (66, 39715), (68, 39727),

Gene: Quartz_64 Start: 40147, Stop: 40425, Start Num: 24

Candidate Starts for Quartz_64:

(Start: 24 @40147 has 14 MA's), (32, 40186), (33, 40204), (34, 40207), (36, 40219), (47, 40249), (51, 40258), (57, 40288), (64, 40342), (67, 40369), (71, 40396),

Gene: Sansa_61 Start: 39788, Stop: 40099, Start Num: 24

Candidate Starts for Sansa_61:

(Start: 24 @39788 has 14 MA's), (33, 39845), (34, 39848), (36, 39860), (46, 39920), (47, 39923), (53, 39935), (64, 40016), (68, 40046), (71, 40070),

Gene: Saratos_63 Start: 39832, Stop: 40143, Start Num: 24

Candidate Starts for Saratos_63:

(Start: 24 @39832 has 14 MA's), (33, 39889), (34, 39892), (36, 39904), (46, 39964), (47, 39967), (53, 39979), (64, 40060), (68, 40090), (72, 40120), (73, 40123),

Gene: Schubert_56 Start: 38451, Stop: 38738, Start Num: 21

Candidate Starts for Schubert_56:

(17, 38439), (19, 38448), (Start: 21 @38451 has 2 MA's), (29, 38493), (34, 38526), (36, 38538), (44, 38568), (52, 38589), (60, 38631), (61, 38649), (68, 38697), (71, 38721),

Gene: Shamu_63 Start: 39721, Stop: 40032, Start Num: 24

Candidate Starts for Shamu_63:

(Start: 24 @39721 has 14 MA's), (33, 39778), (34, 39781), (36, 39793), (46, 39853), (47, 39856), (53, 39868), (64, 39949), (68, 39979), (72, 40009), (73, 40012),

Gene: TwoBits_60 Start: 39613, Stop: 39975, Start Num: 20

Candidate Starts for TwoBits_60:

(14, 39532), (Start: 20 @39613 has 13 MA's), (34, 39685), (36, 39697), (42, 39724), (55, 39820), (56, 39823), (62, 39898), (66, 39925),

Gene: Wardwill_63 Start: 39387, Stop: 39722, Start Num: 20

Candidate Starts for Wardwill_63:

(14, 39306), (Start: 20 @39387 has 13 MA's), (25, 39456), (27, 39468), (28, 39492), (37, 39513), (39, 39525), (45, 39552), (59, 39612), (68, 39684), (69, 39699),

Gene: WilliamStrong_63 Start: 40172, Stop: 40447, Start Num: 20

Candidate Starts for WilliamStrong_63:

(5, 39875), (8, 39890), (12, 39905), (Start: 20 @40172 has 13 MA's), (34, 40229), (36, 40241), (48, 40292), (49, 40295), (67, 40406),

Gene: Xebius_63 Start: 39832, Stop: 40149, Start Num: 20

Candidate Starts for Xebius_63:

(Start: 20 @39832 has 13 MA's), (Start: 23 @39847 has 1 MA's), (26, 39865), (34, 39913), (36, 39925), (46, 39970), (47, 39973), (53, 39985), (64, 40066), (68, 40096), (72, 40126), (73, 40129),

Gene: Zayuliv_62 Start: 39911, Stop: 40141, Start Num: 23

Candidate Starts for Zayuliv_62:

(1, 39584), (4, 39608), (6, 39617), (7, 39623), (9, 39629), (11, 39632), (14, 39821), (Start: 20 @39902 has 13 MA's), (Start: 23 @39911 has 1 MA's), (34, 39932), (36, 39944), (45, 39971), (59, 40031), (68, 40103),

Gene: Zenitsu_63 Start: 39868, Stop: 40179, Start Num: 24

Candidate Starts for Zenitsu_63:

(Start: 24 @39868 has 14 MA's), (33, 39925), (34, 39928), (36, 39940), (46, 40000), (47, 40003), (53, 40015), (64, 40096), (68, 40126), (72, 40156), (73, 40159),