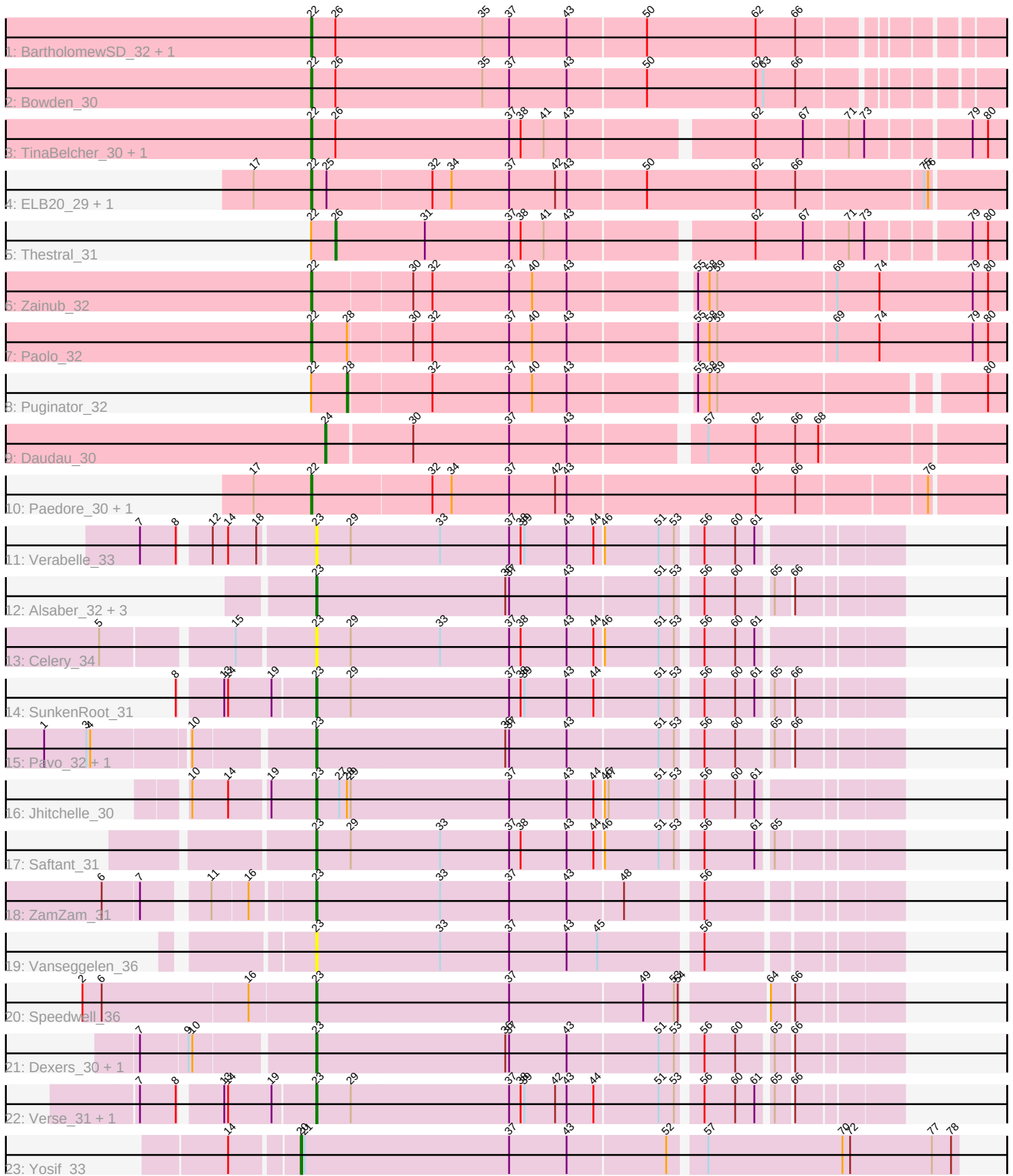


Pham 331081



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 331081 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331081 has 33 members, 3 are drafts.

Phages represented in each track:

- Track 1 : BartholomewSD_32, Alvy_32
- Track 2 : Bowden_30
- Track 3 : TinaBelcher_30, TrvxScott_29
- Track 4 : ELB20_29, R4_30
- Track 5 : Thestral_31
- Track 6 : Zainub_32
- Track 7 : Paolo_32
- Track 8 : Puginator_32
- Track 9 : Daudau_30
- Track 10 : Paedore_30, Loofah_31
- Track 11 : Verabelle_33
- Track 12 : Alsaber_32, Sudan_31, Kaine_31, ElGato_32
- Track 13 : Celery_34
- Track 14 : SunkenRoot_31
- Track 15 : Pavo_32, Conan_32
- Track 16 : Jhitchelle_30
- Track 17 : Saftant_31
- Track 18 : ZamZam_31
- Track 19 : Vanseggelen_36
- Track 20 : Speedwell_36
- Track 21 : Dexers_30, Provolone_32
- Track 22 : Verse_31, Amela_31
- Track 23 : Yosif_33

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

The start number called the most often in the published annotations is 23, it was called in 15 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alsaber_32, Amela_31, Celery_34, Conan_32, Dexers_30, ElGato_32, Jhitchelle_30, Kaine_31, Pavo_32, Provolone_32, Saftant_31, Speedwell_36, Sudan_31, SunkenRoot_31, Vanseggelen_36, Verabelle_33, Verse_31, ZamZam_31,

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

-

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

- Alvy_32, BartholomewSD_32, Bowden_30, Daudau_30, ELB20_29, Loofah_31, Paedore_30, Paolo_32, Puginator_32, R4_30, Thestral_31, TinaBelcher_30, TrvxScott_29, Yosif_33, Zainub_32,

Summary by start number:

Start 20:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yosif_33 (BD3),

Start 22:

- Found in 13 of 33 (39.4%) of genes in pham
- Manual Annotations of this start: 11 of 30
- Called 84.6% of time when present
- Phage (with cluster) where this start called: Alvy_32 (BD2), BartholomewSD_32 (BD2), Bowden_30 (BD2), ELB20_29 (BD2), Loofah_31 (BD2), Paedore_30 (BD2), Paolo_32 (BD2), R4_30 (BD2), TinaBelcher_30 (BD2), TrvxScott_29 (BD2), Zainub_32 (BD2),

Start 23:

- Found in 18 of 33 (54.5%) of genes in pham
- Manual Annotations of this start: 15 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsaber_32 (BD3), Amela_31 (BD3), Celery_34 (BD3), Conan_32 (BD3), Dexers_30 (BD3), ElGato_32 (BD3), Jhitchelle_30 (BD3), Kaine_31 (BD3), Pavo_32 (BD3), Provolone_32 (BD3), Saftant_31 (BD3), Speedwell_36 (BD3), Sudan_31 (BD3), SunkenRoot_31 (BD3), Vanseggelen_36 (BD3), Verabelle_33 (BD3), Verse_31 (BD3), ZamZam_31 (BD3),

Start 24:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daudau_30 (BD2),

Start 26:

- Found in 6 of 33 (18.2%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Thestral_31 (BD2),

Start 28:

- Found in 3 of 33 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Puginator_32 (BD2),

Summary by clusters:

There are 2 clusters represented in this pham: BD3, BD2,

Info for manual annotations of cluster BD2:

- Start number 22 was manually annotated 11 times for cluster BD2.
- Start number 24 was manually annotated 1 time for cluster BD2.
- Start number 26 was manually annotated 1 time for cluster BD2.
- Start number 28 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 20 was manually annotated 1 time for cluster BD3.
- Start number 23 was manually annotated 15 times for cluster BD3.

Gene Information:

Gene: Alsaber_32 Start: 25015, Stop: 25443, Start Num: 23

Candidate Starts for Alsaber_32:

(Start: 23 @25015 has 15 MA's), (36, 25162), (37, 25165), (43, 25210), (51, 25279), (53, 25291), (56, 25306), (60, 25330), (65, 25354), (66, 25366),

Gene: Alvy_32 Start: 24316, Stop: 24822, Start Num: 22

Candidate Starts for Alvy_32:

(Start: 22 @24316 has 11 MA's), (Start: 26 @24334 has 1 MA's), (35, 24448), (37, 24469), (43, 24514), (50, 24574), (62, 24658), (66, 24688),

Gene: Amela_31 Start: 25848, Stop: 26276, Start Num: 23

Candidate Starts for Amela_31:

(7, 25728), (8, 25755), (13, 25782), (14, 25785), (19, 25818), (Start: 23 @25848 has 15 MA's), (29, 25875), (37, 25998), (38, 26007), (39, 26010), (42, 26034), (43, 26043), (44, 26064), (51, 26112), (53, 26124), (56, 26139), (60, 26163), (61, 26178), (65, 26187), (66, 26199),

Gene: BartholomewSD_32 Start: 24316, Stop: 24822, Start Num: 22

Candidate Starts for BartholomewSD_32:

(Start: 22 @24316 has 11 MA's), (Start: 26 @24334 has 1 MA's), (35, 24448), (37, 24469), (43, 24514), (50, 24574), (62, 24658), (66, 24688),

Gene: Bowden_30 Start: 24231, Stop: 24737, Start Num: 22

Candidate Starts for Bowden_30:

(Start: 22 @24231 has 11 MA's), (Start: 26 @24249 has 1 MA's), (35, 24363), (37, 24384), (43, 24429), (50, 24489), (62, 24573), (63, 24579), (66, 24603),

Gene: Celery_34 Start: 24947, Stop: 25378, Start Num: 23

Candidate Starts for Celery_34:

(5, 24800), (15, 24893), (Start: 23 @24947 has 15 MA's), (29, 24974), (33, 25043), (37, 25097), (38, 25106), (43, 25142), (44, 25163), (46, 25169), (51, 25211), (53, 25223), (56, 25238), (60, 25262), (61, 25277),

Gene: Conan_32 Start: 24911, Stop: 25339, Start Num: 23

Candidate Starts for Conan_32:

(1, 24719), (3, 24752), (4, 24755), (10, 24827), (Start: 23 @24911 has 15 MA's), (36, 25058), (37, 25061), (43, 25106), (51, 25175), (53, 25187), (56, 25202), (60, 25226), (65, 25250), (66, 25262),

Gene: Daudau_30 Start: 23992, Stop: 24489, Start Num: 24

Candidate Starts for Daudau_30:

(Start: 24 @23992 has 1 MA's), (30, 24055), (37, 24130), (43, 24175), (57, 24271), (62, 24307), (66, 24337), (68, 24355),

Gene: Dexers_30 Start: 24937, Stop: 25365, Start Num: 23

Candidate Starts for Dexers_30:

(7, 24814), (9, 24850), (10, 24853), (Start: 23 @24937 has 15 MA's), (36, 25084), (37, 25087), (43, 25132), (51, 25201), (53, 25213), (56, 25228), (60, 25252), (65, 25276), (66, 25288),

Gene: ELB20_29 Start: 24348, Stop: 24869, Start Num: 22

Candidate Starts for ELB20_29:

(17, 24303), (Start: 22 @24348 has 11 MA's), (25, 24360), (32, 24438), (34, 24453), (37, 24498), (42, 24534), (43, 24543), (50, 24603), (62, 24687), (66, 24717), (75, 24810), (76, 24813),

Gene: ElGato_32 Start: 24575, Stop: 25003, Start Num: 23

Candidate Starts for ElGato_32:

(Start: 23 @24575 has 15 MA's), (36, 24722), (37, 24725), (43, 24770), (51, 24839), (53, 24851), (56, 24866), (60, 24890), (65, 24914), (66, 24926),

Gene: Jhitchelle_30 Start: 24461, Stop: 24892, Start Num: 23

Candidate Starts for Jhitchelle_30:

(10, 24374), (14, 24401), (19, 24428), (Start: 23 @24461 has 15 MA's), (27, 24479), (Start: 28 @24485 has 1 MA's), (29, 24488), (37, 24611), (43, 24656), (44, 24677), (46, 24683), (47, 24686), (51, 24725), (53, 24737), (56, 24752), (60, 24776), (61, 24791),

Gene: Kaine_31 Start: 24724, Stop: 25152, Start Num: 23

Candidate Starts for Kaine_31:

(Start: 23 @24724 has 15 MA's), (36, 24871), (37, 24874), (43, 24919), (51, 24988), (53, 25000), (56, 25015), (60, 25039), (65, 25063), (66, 25075),

Gene: Loofah_31 Start: 24242, Stop: 24760, Start Num: 22

Candidate Starts for Loofah_31:

(17, 24197), (Start: 22 @24242 has 11 MA's), (32, 24332), (34, 24347), (37, 24392), (42, 24428), (43, 24437), (62, 24581), (66, 24611), (76, 24704),

Gene: Paedore_30 Start: 24227, Stop: 24745, Start Num: 22

Candidate Starts for Paedore_30:

(17, 24182), (Start: 22 @24227 has 11 MA's), (32, 24317), (34, 24332), (37, 24377), (42, 24413), (43, 24422), (62, 24566), (66, 24596), (76, 24689),

Gene: Paolo_32 Start: 24568, Stop: 25086, Start Num: 22

Candidate Starts for Paolo_32:

(Start: 22 @24568 has 11 MA's), (Start: 28 @24595 has 1 MA's), (30, 24643), (32, 24658), (37, 24718), (40, 24736), (43, 24763), (55, 24850), (58, 24859), (59, 24865), (69, 24955), (74, 24988), (79, 25060), (80, 25072),

Gene: Pavo_32 Start: 25184, Stop: 25612, Start Num: 23

Candidate Starts for Pavo_32:

(1, 24992), (3, 25025), (4, 25028), (10, 25100), (Start: 23 @25184 has 15 MA's), (36, 25331), (37, 25334), (43, 25379), (51, 25448), (53, 25460), (56, 25475), (60, 25499), (65, 25523), (66, 25535),

Gene: Provolone_32 Start: 24566, Stop: 24994, Start Num: 23

Candidate Starts for Provolone_32:

(7, 24443), (9, 24479), (10, 24482), (Start: 23 @24566 has 15 MA's), (36, 24713), (37, 24716), (43, 24761), (51, 24830), (53, 24842), (56, 24857), (60, 24881), (65, 24905), (66, 24917),

Gene: Puginator_32 Start: 24631, Stop: 25107, Start Num: 28

Candidate Starts for Puginator_32:

(Start: 22 @24604 has 11 MA's), (Start: 28 @24631 has 1 MA's), (32, 24694), (37, 24754), (40, 24772), (43, 24799), (55, 24886), (58, 24895), (59, 24901), (80, 25093),

Gene: R4_30 Start: 24358, Stop: 24879, Start Num: 22

Candidate Starts for R4_30:

(17, 24313), (Start: 22 @24358 has 11 MA's), (25, 24370), (32, 24448), (34, 24463), (37, 24508), (42, 24544), (43, 24553), (50, 24613), (62, 24697), (66, 24727), (75, 24820), (76, 24823),

Gene: Saftant_31 Start: 25130, Stop: 25558, Start Num: 23

Candidate Starts for Saftant_31:

(Start: 23 @25130 has 15 MA's), (29, 25157), (33, 25226), (37, 25280), (38, 25289), (43, 25325), (44, 25346), (46, 25352), (51, 25394), (53, 25406), (56, 25421), (61, 25460), (65, 25469),

Gene: Speedwell_36 Start: 26449, Stop: 26880, Start Num: 23

Candidate Starts for Speedwell_36:

(2, 26275), (6, 26290), (16, 26401), (Start: 23 @26449 has 15 MA's), (37, 26599), (49, 26701), (53, 26725), (54, 26728), (64, 26788), (66, 26803),

Gene: Sudan_31 Start: 25011, Stop: 25439, Start Num: 23

Candidate Starts for Sudan_31:

(Start: 23 @25011 has 15 MA's), (36, 25158), (37, 25161), (43, 25206), (51, 25275), (53, 25287), (56, 25302), (60, 25326), (65, 25350), (66, 25362),

Gene: SunkenRoot_31 Start: 25648, Stop: 26076, Start Num: 23

Candidate Starts for SunkenRoot_31:

(8, 25555), (13, 25582), (14, 25585), (19, 25618), (Start: 23 @25648 has 15 MA's), (29, 25675), (37, 25798), (38, 25807), (39, 25810), (43, 25843), (44, 25864), (51, 25912), (53, 25924), (56, 25939), (60, 25963), (61, 25978), (65, 25987), (66, 25999),

Gene: Thestral_31 Start: 24232, Stop: 24723, Start Num: 26

Candidate Starts for Thestral_31:

(Start: 22 @24214 has 11 MA's), (Start: 26 @24232 has 1 MA's), (31, 24301), (37, 24367), (38, 24376), (41, 24394), (43, 24412), (62, 24544), (67, 24580), (71, 24613), (73, 24625), (79, 24697), (80, 24709),

Gene: TinaBelcher_30 Start: 24161, Stop: 24670, Start Num: 22

Candidate Starts for TinaBelcher_30:

(Start: 22 @24161 has 11 MA's), (Start: 26 @24179 has 1 MA's), (37, 24314), (38, 24323), (41, 24341), (43, 24359), (62, 24491), (67, 24527), (71, 24560), (73, 24572), (79, 24644), (80, 24656),

Gene: TrvxScott_29 Start: 24207, Stop: 24716, Start Num: 22

Candidate Starts for TrvxScott_29:

(Start: 22 @24207 has 11 MA's), (Start: 26 @24225 has 1 MA's), (37, 24360), (38, 24369), (41, 24387), (43, 24405), (62, 24537), (67, 24573), (71, 24606), (73, 24618), (79, 24690), (80, 24702),

Gene: Vanseggelen_36 Start: 24694, Stop: 25125, Start Num: 23

Candidate Starts for Vanseggelen_36:

(Start: 23 @24694 has 15 MA's), (33, 24790), (37, 24844), (43, 24889), (45, 24913), (56, 24988),

Gene: Verabelle_33 Start: 25098, Stop: 25529, Start Num: 23

Candidate Starts for Verabelle_33:

(7, 24981), (8, 25008), (12, 25026), (14, 25038), (18, 25059), (Start: 23 @25098 has 15 MA's), (29, 25125), (33, 25194), (37, 25248), (38, 25257), (39, 25260), (43, 25293), (44, 25314), (46, 25320), (51, 25362), (53, 25374), (56, 25389), (60, 25413), (61, 25428),

Gene: Verse_31 Start: 25842, Stop: 26270, Start Num: 23

Candidate Starts for Verse_31:

(7, 25722), (8, 25749), (13, 25776), (14, 25779), (19, 25812), (Start: 23 @25842 has 15 MA's), (29, 25869), (37, 25992), (38, 26001), (39, 26004), (42, 26028), (43, 26037), (44, 26058), (51, 26106), (53, 26118), (56, 26133), (60, 26157), (61, 26172), (65, 26181), (66, 26193),

Gene: Yosif_33 Start: 25462, Stop: 25962, Start Num: 20

Candidate Starts for Yosif_33:

(14, 25414), (Start: 20 @25462 has 1 MA's), (21, 25465), (37, 25624), (43, 25669), (52, 25744), (57, 25768), (70, 25873), (72, 25879), (77, 25942), (78, 25957),

Gene: Zainub_32 Start: 24529, Stop: 25047, Start Num: 22

Candidate Starts for Zainub_32:

(Start: 22 @24529 has 11 MA's), (30, 24604), (32, 24619), (37, 24679), (40, 24697), (43, 24724), (55, 24811), (58, 24820), (59, 24826), (69, 24916), (74, 24949), (79, 25021), (80, 25033),

Gene: ZamZam_31 Start: 25123, Stop: 25551, Start Num: 23

Candidate Starts for ZamZam_31:

(6, 24982), (7, 25009), (11, 25051), (16, 25078), (Start: 23 @25123 has 15 MA's), (33, 25219), (37, 25273), (43, 25318), (48, 25360), (56, 25414),