

Pham 157837



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 157837 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157837 has 70 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Salz_46, Flaverint_48, Orange_47, Bowtie_48, Et2Brutus_46, Bachome_49, MaCh_48, Jabith_48, Hutc2_47, Joselito_48, Insomnia_47, Timothy_47, Ebony_47, Snape_47, TinyTimmy_46, Bud_47, Munch_48, Fibonacci_47, Gilberta_48, Petersenfast_46, Sham4_47, Mabel_47, Aneem_48, Lucivia_48, Mulciber_47
- Track 2 : Pharaoh_41
- Track 3 : Refuge_46
- Track 4 : Zimmer_44
- Track 5 : SororFago_50
- Track 6 : Luchador_52, Jeeves_52
- Track 7 : Gail_52
- Track 8 : Nedarya_45
- Track 9 : Oofda_50
- Track 10 : PainterBoy_48, EagleEye_49, Lucyedi_48
- Track 11 : XianYue_46
- Track 12 : Anthony_42
- Track 13 : Elephantoon_46
- Track 14 : Alma_47, Phaeder_47, Tubs_47, ExplosioNervosa_47, EmyBug_44, HortumSL17_47, Scherzo_47, Eidsmoe_47, PackMan_46, Pioneer_47, Conquerage_47, Aliter_47, Ugenie5_44, Spouty_45, Phonnegut_47, Fayely_47, Qobbit_47, Myxus_47, Priya_47, Catalina_48, Beemo_47
- Track 15 : LoneWolf_47
- Track 16 : Darrell_47
- Track 17 : BogosyJay_46, Maminiaina_46
- Track 18 : Toaka_46
- Track 19 : Vanisoa_46
- Track 20 : Keziacharles14_47
- Track 21 : Rahalelujah_46
- Track 22 : Yecey3_48

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

The start number called the most often in the published annotations is 14, it was called in 30 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem_48, Bachome_49, BogosyJay_46, Bowtie_48, Bud_47, Darrell_47, Ebony_47, Elephantoon_46, Et2Brutus_46, Fibonacci_47, Flaverint_48, Gilberta_48, Hutc2_47, Insomnia_47, Jabith_48, Joselito_48, Keziacharles14_47, Lucivia_48, MaCh_48, Mabel_47, Maminaiaina_46, Mulciber_47, Munch_48, Orange_47, Petersenfast_46, Pharaoh_41, Rahalelujah_46, Refuge_46, Salz_46, Sham4_47, Snape_47, Timothy_47, TinyTimmy_46, Zimmer_44,

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

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

- Aliter_47, Alma_47, Anthony_42, Beemo_47, Catalina_48, Conquerage_47, EagleEye_49, Eidsmoe_47, EmyBug_44, ExplosioNervosa_47, Fayely_47, Gail_52, HortumSL17_47, Jeeves_52, LoneWolf_47, Luchador_52, Lucyedi_48, Myxus_47, Nedarya_45, Oofda_50, PackMan_46, PainterBoy_48, Phaeder_47, Phonnegut_47, Pioneer_47, Priya_47, Qobbit_47, Scherzo_47, SororFago_50, Spouty_45, Toaka_46, Tubs_47, Ugenie5_44, Vanisoa_46, XianYue_46, Yecey3_48,

Summary by start number:

Start 9:

- Found in 3 of 70 (4.3%) of genes in pham
- Manual Annotations of this start: 3 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_49 (A16), Lucyedi_48 (A16), PainterBoy_48 (A16),

Start 10:

- Found in 1 of 70 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_47 (A9),

Start 11:

- Found in 2 of 70 (2.9%) of genes in pham
- Manual Annotations of this start: 2 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toaka_46 (A9), Vanisoa_46 (A9),

Start 12:

- Found in 22 of 70 (31.4%) of genes in pham
- Manual Annotations of this start: 20 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aliter_47 (A9), Alma_47 (A9), Beemo_47 (A9), Catalina_48 (A9), Conquerage_47 (A9), Eidsmoe_47 (A9), EmyBug_44 (A9), ExplosioNervosa_47 (A9), Fayely_47 (A9), HortumSL17_47 (A9), Myxus_47 (A9), PackMan_46 (A9), Phaeder_47 (A9), Phonnegut_47 (A9), Pioneer_47 (A9), Priya_47 (A9), Qobbit_47 (A9), Scherzo_47 (A9), Spouty_45 (A9), Tubs_47 (A9), Ugenie5_44 (A9), Yecey3_48 (A9),

Start 14:

- Found in 34 of 70 (48.6%) of genes in pham
- Manual Annotations of this start: 30 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aneem_48 (A11), Bachome_49 (A11), BogosyJay_46 (A9), Bowtie_48 (A11), Bud_47 (A11), Darrell_47 (A9), Ebony_47 (A11), Elephantoon_46 (A9), Et2Brutus_46 (A11), Fibonacci_47 (A11), Flaverint_48 (A11), Gilberta_48 (A11), Hutc2_47 (A11), Insomnia_47 (A11), Jabith_48 (A11), Joselito_48 (A11), Keziacharles14_47 (A9), Lucivia_48 (A11), MaCh_48 (A11), Mabel_47 (A11), Maminiaina_46 (A9), Mulciber_47 (A11), Munch_48 (A11), Orange_47 (A11), Petersenfast_46 (A11), Pharaoh_41 (A12), Rahalelujah_46 (A9), Refuge_46 (A12), Salz_46 (A11), Sham4_47 (A11), Snape_47 (A11), Timothy_47 (A11), TinyTimmy_46 (A11), Zimmer_44 (A12),

Start 15:

- Found in 4 of 70 (5.7%) of genes in pham
- Manual Annotations of this start: 4 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_52 (A14), Jeeves_52 (A14), Luchador_52 (A14), SororFago_50 (A14),

Start 16:

- Found in 1 of 70 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: XianYue_46 (A2),

Start 18:

- Found in 2 of 70 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Nedarya_45 (A15),

Start 24:

- Found in 1 of 70 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Oofda_50 (A15),

Start 27:

- Found in 1 of 70 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 63
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony_42 (A20),

Summary by clusters:

There are 8 clusters represented in this pham: A15, A14, A16, A11, A12, A20, A2, A9,

Info for manual annotations of cluster A11:

- Start number 14 was manually annotated 22 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 14 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 15 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 18 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A16:

- Start number 9 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 16 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 27 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A9:

- Start number 10 was manually annotated 1 time for cluster A9.
- Start number 11 was manually annotated 2 times for cluster A9.
- Start number 12 was manually annotated 20 times for cluster A9.
- Start number 14 was manually annotated 5 times for cluster A9.

Gene Information:

Gene: Aliter_47 Start: 32037, Stop: 31711, Start Num: 12

Candidate Starts for Aliter_47:

(Start: 12 @32037 has 20 MA's), (19, 32013), (26, 31971), (42, 31731),

Gene: Alma_47 Start: 32160, Stop: 31834, Start Num: 12

Candidate Starts for Alma_47:

(Start: 12 @32160 has 20 MA's), (19, 32136), (26, 32094), (42, 31854),

Gene: Aneem_48 Start: 31705, Stop: 31358, Start Num: 14

Candidate Starts for Aneem_48:

(Start: 14 @31705 has 30 MA's), (20, 31672), (23, 31651), (40, 31438), (41, 31405),

Gene: Anthony_42 Start: 29795, Stop: 29478, Start Num: 27

Candidate Starts for Anthony_42:

(5, 29948), (13, 29870), (Start: 27 @29795 has 1 MA's), (31, 29747), (33, 29741), (40, 29561), (42, 29501),

Gene: Bachome_49 Start: 31693, Stop: 31346, Start Num: 14

Candidate Starts for Bachome_49:

(Start: 14 @31693 has 30 MA's), (20, 31660), (23, 31639), (40, 31426), (41, 31393),

Gene: Beemo_47 Start: 32159, Stop: 31833, Start Num: 12

Candidate Starts for Beemo_47:

(Start: 12 @32159 has 20 MA's), (19, 32135), (26, 32093), (42, 31853),

Gene: BogosyJay_46 Start: 31869, Stop: 31543, Start Num: 14

Candidate Starts for BogosyJay_46:

(Start: 14 @31869 has 30 MA's), (19, 31845), (26, 31803), (32, 31761), (42, 31563),

Gene: Bowtie_48 Start: 31712, Stop: 31365, Start Num: 14

Candidate Starts for Bowtie_48:

(Start: 14 @31712 has 30 MA's), (20, 31679), (23, 31658), (40, 31445), (41, 31412),

Gene: Bud_47 Start: 31267, Stop: 30920, Start Num: 14

Candidate Starts for Bud_47:

(Start: 14 @31267 has 30 MA's), (20, 31234), (23, 31213), (40, 31000), (41, 30967),

Gene: Catalina_48 Start: 32110, Stop: 31784, Start Num: 12

Candidate Starts for Catalina_48:

(Start: 12 @32110 has 20 MA's), (19, 32086), (26, 32044), (42, 31804),

Gene: Conquerage_47 Start: 32133, Stop: 31807, Start Num: 12

Candidate Starts for Conquerage_47:

(Start: 12 @32133 has 20 MA's), (19, 32109), (26, 32067), (42, 31827),

Gene: Darrell_47 Start: 32497, Stop: 32153, Start Num: 14

Candidate Starts for Darrell_47:

(6, 32539), (8, 32518), (Start: 14 @32497 has 30 MA's), (Start: 18 @32482 has 1 MA's), (26, 32434), (28, 32413), (35, 32359), (42, 32173),

Gene: EagleEye_49 Start: 31670, Stop: 31308, Start Num: 9

Candidate Starts for EagleEye_49:

(Start: 9 @31670 has 3 MA's), (17, 31646), (40, 31388),

Gene: Ebony_47 Start: 31284, Stop: 30937, Start Num: 14

Candidate Starts for Ebony_47:

(Start: 14 @31284 has 30 MA's), (20, 31251), (23, 31230), (40, 31017), (41, 30984),

Gene: Eidsmoe_47 Start: 32173, Stop: 31847, Start Num: 12

Candidate Starts for Eidsmoe_47:

(Start: 12 @32173 has 20 MA's), (19, 32149), (26, 32107), (42, 31867),

Gene: Elephantoon_46 Start: 31477, Stop: 31130, Start Num: 14

Candidate Starts for Elephantoon_46:

(Start: 14 @31477 has 30 MA's), (19, 31453), (26, 31411), (35, 31336), (37, 31318), (42, 31150),

Gene: EmyBug_44 Start: 32175, Stop: 31849, Start Num: 12

Candidate Starts for EmyBug_44:

(Start: 12 @32175 has 20 MA's), (19, 32151), (26, 32109), (42, 31869),

Gene: Et2Brutus_46 Start: 31244, Stop: 30897, Start Num: 14

Candidate Starts for Et2Brutus_46:

(Start: 14 @31244 has 30 MA's), (20, 31211), (23, 31190), (40, 30977), (41, 30944),

Gene: ExplosioNervosa_47 Start: 32193, Stop: 31867, Start Num: 12

Candidate Starts for ExplosioNervosa_47:

(Start: 12 @32193 has 20 MA's), (19, 32169), (26, 32127), (42, 31887),

Gene: Fayely_47 Start: 32142, Stop: 31816, Start Num: 12

Candidate Starts for Fayely_47:

(Start: 12 @32142 has 20 MA's), (19, 32118), (26, 32076), (42, 31836),

Gene: Fibonacci_47 Start: 31259, Stop: 30912, Start Num: 14

Candidate Starts for Fibonacci_47:

(Start: 14 @31259 has 30 MA's), (20, 31226), (23, 31205), (40, 30992), (41, 30959),

Gene: Flaverint_48 Start: 31706, Stop: 31359, Start Num: 14

Candidate Starts for Flaverint_48:

(Start: 14 @31706 has 30 MA's), (20, 31673), (23, 31652), (40, 31439), (41, 31406),

Gene: Gail_52 Start: 33875, Stop: 33528, Start Num: 15

Candidate Starts for Gail_52:

(6, 33899), (Start: 15 @33875 has 4 MA's), (26, 33815), (40, 33608), (42, 33548), (43, 33539),

Gene: Gilberta_48 Start: 31696, Stop: 31349, Start Num: 14

Candidate Starts for Gilberta_48:

(Start: 14 @31696 has 30 MA's), (20, 31663), (23, 31642), (40, 31429), (41, 31396),

Gene: HortumSL17_47 Start: 32109, Stop: 31783, Start Num: 12

Candidate Starts for HortumSL17_47:

(Start: 12 @32109 has 20 MA's), (19, 32085), (26, 32043), (42, 31803),

Gene: Hutc2_47 Start: 31259, Stop: 30912, Start Num: 14

Candidate Starts for Hutc2_47:

(Start: 14 @31259 has 30 MA's), (20, 31226), (23, 31205), (40, 30992), (41, 30959),

Gene: Insomnia_47 Start: 31764, Stop: 31417, Start Num: 14

Candidate Starts for Insomnia_47:

(Start: 14 @31764 has 30 MA's), (20, 31731), (23, 31710), (40, 31497), (41, 31464),

Gene: Jabith_48 Start: 31765, Stop: 31418, Start Num: 14

Candidate Starts for Jabith_48:

(Start: 14 @31765 has 30 MA's), (20, 31732), (23, 31711), (40, 31498), (41, 31465),

Gene: Jeeves_52 Start: 32647, Stop: 32300, Start Num: 15

Candidate Starts for Jeeves_52:

(6, 32671), (Start: 15 @32647 has 4 MA's), (26, 32587), (40, 32380), (42, 32320),

Gene: Joselito_48 Start: 31705, Stop: 31358, Start Num: 14

Candidate Starts for Joselito_48:

(Start: 14 @31705 has 30 MA's), (20, 31672), (23, 31651), (40, 31438), (41, 31405),

Gene: Keziacharles14_47 Start: 33144, Stop: 32797, Start Num: 14

Candidate Starts for Keziacharles14_47:

(Start: 14 @33144 has 30 MA's), (19, 33120), (26, 33078), (34, 33015), (35, 33003), (42, 32817), (43, 32808),

Gene: LoneWolf_47 Start: 31870, Stop: 31502, Start Num: 10

Candidate Starts for LoneWolf_47:

(2, 32050), (3, 31999), (4, 31975), (Start: 10 @31870 has 1 MA's), (19, 31846), (26, 31804), (30, 31762), (42, 31522),

Gene: Luchador_52 Start: 34435, Stop: 34088, Start Num: 15
Candidate Starts for Luchador_52:
(6, 34459), (Start: 15 @34435 has 4 MA's), (26, 34375), (40, 34168), (42, 34108),

Gene: Lucivia_48 Start: 31754, Stop: 31407, Start Num: 14
Candidate Starts for Lucivia_48:
(Start: 14 @31754 has 30 MA's), (20, 31721), (23, 31700), (40, 31487), (41, 31454),

Gene: Lucyedi_48 Start: 31865, Stop: 31503, Start Num: 9
Candidate Starts for Lucyedi_48:
(Start: 9 @31865 has 3 MA's), (17, 31841), (40, 31583),

Gene: MaCh_48 Start: 31692, Stop: 31345, Start Num: 14
Candidate Starts for MaCh_48:
(Start: 14 @31692 has 30 MA's), (20, 31659), (23, 31638), (40, 31425), (41, 31392),

Gene: Mabel_47 Start: 31294, Stop: 30947, Start Num: 14
Candidate Starts for Mabel_47:
(Start: 14 @31294 has 30 MA's), (20, 31261), (23, 31240), (40, 31027), (41, 30994),

Gene: Maminiaina_46 Start: 31851, Stop: 31525, Start Num: 14
Candidate Starts for Maminiaina_46:
(Start: 14 @31851 has 30 MA's), (19, 31827), (26, 31785), (32, 31743), (42, 31545),

Gene: Mulciber_47 Start: 31256, Stop: 30909, Start Num: 14
Candidate Starts for Mulciber_47:
(Start: 14 @31256 has 30 MA's), (20, 31223), (23, 31202), (40, 30989), (41, 30956),

Gene: Munch_48 Start: 31705, Stop: 31358, Start Num: 14
Candidate Starts for Munch_48:
(Start: 14 @31705 has 30 MA's), (20, 31672), (23, 31651), (40, 31438), (41, 31405),

Gene: Myxus_47 Start: 32109, Stop: 31783, Start Num: 12
Candidate Starts for Myxus_47:
(Start: 12 @32109 has 20 MA's), (19, 32085), (26, 32043), (42, 31803),

Gene: Nedarya_45 Start: 30054, Stop: 29713, Start Num: 18
Candidate Starts for Nedarya_45:
(Start: 18 @30054 has 1 MA's), (39, 29883), (40, 29796),

Gene: Oofda_50 Start: 30484, Stop: 30191, Start Num: 24
Candidate Starts for Oofda_50:
(24, 30484), (38, 30367), (40, 30274),

Gene: Orange_47 Start: 31254, Stop: 30907, Start Num: 14
Candidate Starts for Orange_47:
(Start: 14 @31254 has 30 MA's), (20, 31221), (23, 31200), (40, 30987), (41, 30954),

Gene: PackMan_46 Start: 32109, Stop: 31783, Start Num: 12
Candidate Starts for PackMan_46:
(Start: 12 @32109 has 20 MA's), (19, 32085), (26, 32043), (42, 31803),

Gene: PainterBoy_48 Start: 31801, Stop: 31439, Start Num: 9

Candidate Starts for PainterBoy_48:
(Start: 9 @31801 has 3 MA's), (17, 31777), (40, 31519),

Gene: Petersenfast_46 Start: 31261, Stop: 30914, Start Num: 14
Candidate Starts for Petersenfast_46:
(Start: 14 @31261 has 30 MA's), (20, 31228), (23, 31207), (40, 30994), (41, 30961),

Gene: Phaeder_47 Start: 32109, Stop: 31783, Start Num: 12
Candidate Starts for Phaeder_47:
(Start: 12 @32109 has 20 MA's), (19, 32085), (26, 32043), (42, 31803),

Gene: Pharaoh_41 Start: 31682, Stop: 31311, Start Num: 14
Candidate Starts for Pharaoh_41:
(1, 32006), (Start: 14 @31682 has 30 MA's), (26, 31619), (35, 31523), (40, 31391),

Gene: Phonnegut_47 Start: 32158, Stop: 31832, Start Num: 12
Candidate Starts for Phonnegut_47:
(Start: 12 @32158 has 20 MA's), (19, 32134), (26, 32092), (42, 31852),

Gene: Pioneer_47 Start: 32158, Stop: 31832, Start Num: 12
Candidate Starts for Pioneer_47:
(Start: 12 @32158 has 20 MA's), (19, 32134), (26, 32092), (42, 31852),

Gene: Priya_47 Start: 32176, Stop: 31850, Start Num: 12
Candidate Starts for Priya_47:
(Start: 12 @32176 has 20 MA's), (19, 32152), (26, 32110), (42, 31870),

Gene: Qobbit_47 Start: 32138, Stop: 31812, Start Num: 12
Candidate Starts for Qobbit_47:
(Start: 12 @32138 has 20 MA's), (19, 32114), (26, 32072), (42, 31832),

Gene: Rahalelujah_46 Start: 31411, Stop: 31040, Start Num: 14
Candidate Starts for Rahalelujah_46:
(2, 31597), (3, 31546), (4, 31522), (Start: 14 @31411 has 30 MA's), (25, 31351), (26, 31348), (42, 31060),

Gene: Refuge_46 Start: 33330, Stop: 32986, Start Num: 14
Candidate Starts for Refuge_46:
(7, 33342), (Start: 14 @33330 has 30 MA's), (21, 33288), (22, 33285), (25, 33267), (32, 33213), (35, 33201), (40, 33066), (42, 33006),

Gene: Salz_46 Start: 31232, Stop: 30885, Start Num: 14
Candidate Starts for Salz_46:
(Start: 14 @31232 has 30 MA's), (20, 31199), (23, 31178), (40, 30965), (41, 30932),

Gene: Scherzo_47 Start: 32347, Stop: 32021, Start Num: 12
Candidate Starts for Scherzo_47:
(Start: 12 @32347 has 20 MA's), (19, 32323), (26, 32281), (42, 32041),

Gene: Sham4_47 Start: 31260, Stop: 30913, Start Num: 14
Candidate Starts for Sham4_47:
(Start: 14 @31260 has 30 MA's), (20, 31227), (23, 31206), (40, 30993), (41, 30960),

Gene: Snape_47 Start: 31258, Stop: 30911, Start Num: 14
Candidate Starts for Snape_47:
(Start: 14 @31258 has 30 MA's), (20, 31225), (23, 31204), (40, 30991), (41, 30958),

Gene: SororFago_50 Start: 33759, Stop: 33412, Start Num: 15
Candidate Starts for SororFago_50:
(6, 33783), (Start: 15 @33759 has 4 MA's), (35, 33624), (36, 33618), (40, 33492), (42, 33432),

Gene: Spouty_45 Start: 32175, Stop: 31849, Start Num: 12
Candidate Starts for Spouty_45:
(Start: 12 @32175 has 20 MA's), (19, 32151), (26, 32109), (42, 31869),

Gene: Timothy_47 Start: 31235, Stop: 30888, Start Num: 14
Candidate Starts for Timothy_47:
(Start: 14 @31235 has 30 MA's), (20, 31202), (23, 31181), (40, 30968), (41, 30935),

Gene: TinyTimmy_46 Start: 31278, Stop: 30931, Start Num: 14
Candidate Starts for TinyTimmy_46:
(Start: 14 @31278 has 30 MA's), (20, 31245), (23, 31224), (40, 31011), (41, 30978),

Gene: Toaka_46 Start: 31676, Stop: 31308, Start Num: 11
Candidate Starts for Toaka_46:
(Start: 11 @31676 has 2 MA's), (19, 31652), (26, 31610), (42, 31328), (43, 31319),

Gene: Tubs_47 Start: 32109, Stop: 31783, Start Num: 12
Candidate Starts for Tubs_47:
(Start: 12 @32109 has 20 MA's), (19, 32085), (26, 32043), (42, 31803),

Gene: Ugenie5_44 Start: 32346, Stop: 32020, Start Num: 12
Candidate Starts for Ugenie5_44:
(Start: 12 @32346 has 20 MA's), (19, 32322), (26, 32280), (42, 32040),

Gene: Vanisoa_46 Start: 32705, Stop: 32358, Start Num: 11
Candidate Starts for Vanisoa_46:
(2, 32888), (3, 32837), (4, 32813), (Start: 11 @32705 has 2 MA's), (19, 32681), (26, 32639), (29, 32609), (42, 32378),

Gene: XianYue_46 Start: 31886, Stop: 31548, Start Num: 16
Candidate Starts for XianYue_46:
(Start: 16 @31886 has 1 MA's), (39, 31712), (41, 31595),

Gene: Yecey3_48 Start: 31582, Stop: 31238, Start Num: 12
Candidate Starts for Yecey3_48:
(Start: 12 @31582 has 20 MA's), (19, 31561), (26, 31519), (30, 31477), (35, 31444), (42, 31258),

Gene: Zimmer_44 Start: 32823, Stop: 32467, Start Num: 14
Candidate Starts for Zimmer_44:
(Start: 14 @32823 has 30 MA's), (21, 32781), (32, 32706), (35, 32694), (37, 32676), (40, 32547), (42, 32487),