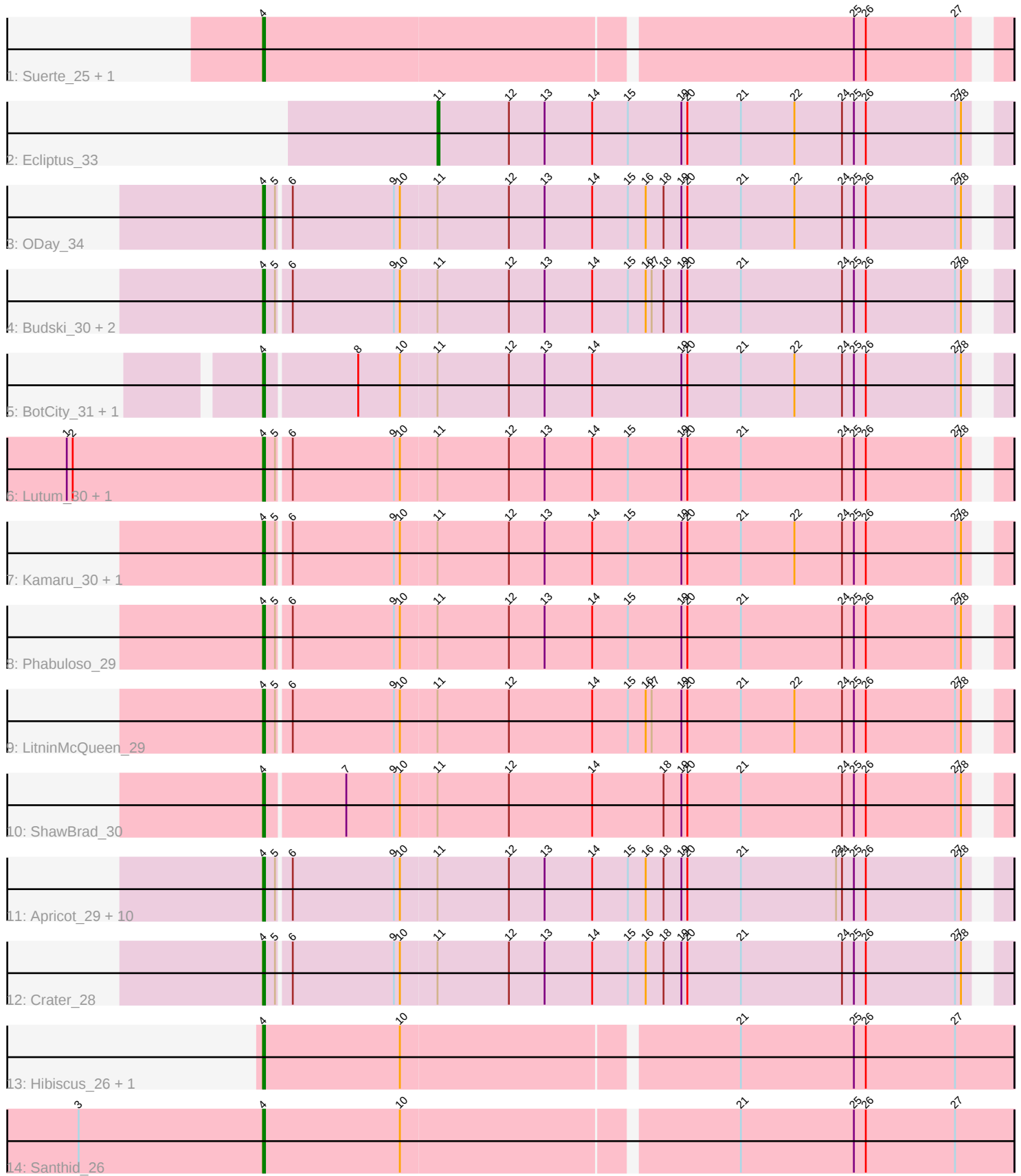


Pham 313758



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 313758 Report

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

Pham number 313758 has 31 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Suerte_25, Thimann_27
- Track 2 : Ecliptus_33
- Track 3 : ODay_34
- Track 4 : Budski_30, Getalong_31, Whitney_31
- Track 5 : BotCity_31, BENtherdunthat_31
- Track 6 : Lutum_30, Kenna_29
- Track 7 : Kamaru_30, Holliday_30
- Track 8 : Phabuloso_29
- Track 9 : LitninMcQueen_29
- Track 10 : ShawBrad_30
- Track 11 : Apricot_29, Asapag_30, Kuwabara_29, MortyNRick_29, Periwinkle_32, BearBQ_29, Leroy_30, Frickyeh_29, Birdsong_29, Horus_30, Phistory_31
- Track 12 : Crater_28
- Track 13 : Hibiscus_26, Heinz_26
- Track 14 : Santhid_26

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

The start number called the most often in the published annotations is 4, it was called in 29 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot_29, Asapag_30, BENtherdunthat_31, BearBQ_29, Birdsong_29, BotCity_31, Budski_30, Crater_28, Frickyeh_29, Getalong_31, Heinz_26, Hibiscus_26, Holliday_30, Horus_30, Kamaru_30, Kenna_29, Kuwabara_29, Leroy_30, LitninMcQueen_29, Lutum_30, MortyNRick_29, ODay_34, Periwinkle_32, Phabuloso_29, Phistory_31, Santhid_26, ShawBrad_30, Suerte_25, Thimann_27, Whitney_31,

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

-

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

- Ecliptus_33,

Summary by start number:

Start 4:

- Found in 30 of 31 (96.8%) of genes in pham
- Manual Annotations of this start: 29 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_29 (DN3), Asapag_30 (DN1), BENTherdunthat_31 (DN1), BearBQ_29 (DN), Birdsong_29 (DN), BotCity_31 (DN), Budski_30 (DN), Crater_28 (DN3), Frickyeh_29 (DN1), Getalong_31 (DN1), Heinz_26 (DY), Hibiscus_26 (DY), Holliday_30 (DN1), Horus_30 (DN1), Kamaru_30 (DN1), Kenna_29 (DN1), Kuwabara_29 (DN4), Leroy_30 (DN1), LitninMcQueen_29 (DN1), Lutum_30 (DN1), MortyNRick_29 (DN), ODay_34 (DN), Periwinkle_32 (DN1), Phabuloso_29 (DN1), Phistory_31 (DN1), Santhid_26 (DY), ShawBrad_30 (DN1), Suerte_25 (CZ4), Thimann_27 (CZ4), Whitney_31 (DN1),

Start 11:

- Found in 26 of 31 (83.9%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Ecliptus_33 (DN),

Summary by clusters:

There are 6 clusters represented in this pham: DN, CZ4, DN4, DN1, DN3, DY,

Info for manual annotations of cluster CZ4:

- Start number 4 was manually annotated 2 times for cluster CZ4.

Info for manual annotations of cluster DN:

- Start number 4 was manually annotated 6 times for cluster DN.
- Start number 11 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 4 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 4 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 4 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DY:

- Start number 4 was manually annotated 3 times for cluster DY.

Gene Information:

Gene: Apricot_29 Start: 23511, Stop: 23873, Start Num: 4

Candidate Starts for Apricot_29:

(Start: 4 @23511 has 29 MA's), (5, 23517), (6, 23523), (9, 23574), (10, 23577), (Start: 11 @23595 has 1 MA's), (12, 23631), (13, 23649), (14, 23673), (15, 23691), (16, 23700), (18, 23709), (19, 23718), (20,

23721), (21, 23748), (23, 23796), (24, 23799), (25, 23805), (26, 23811), (27, 23856), (28, 23859),

Gene: Asapag_30 Start: 23953, Stop: 24315, Start Num: 4

Candidate Starts for Asapag_30:

(Start: 4 @23953 has 29 MA's), (5, 23959), (6, 23965), (9, 24016), (10, 24019), (Start: 11 @24037 has 1 MA's), (12, 24073), (13, 24091), (14, 24115), (15, 24133), (16, 24142), (18, 24151), (19, 24160), (20, 24163), (21, 24190), (23, 24238), (24, 24241), (25, 24247), (26, 24253), (27, 24298), (28, 24301),

Gene: BENtherdunthat_31 Start: 23518, Stop: 23880, Start Num: 4

Candidate Starts for BENtherdunthat_31:

(Start: 4 @23518 has 29 MA's), (8, 23563), (10, 23584), (Start: 11 @23602 has 1 MA's), (12, 23638), (13, 23656), (14, 23680), (19, 23725), (20, 23728), (21, 23755), (22, 23782), (24, 23806), (25, 23812), (26, 23818), (27, 23863), (28, 23866),

Gene: BearBQ_29 Start: 24739, Stop: 25101, Start Num: 4

Candidate Starts for BearBQ_29:

(Start: 4 @24739 has 29 MA's), (5, 24745), (6, 24751), (9, 24802), (10, 24805), (Start: 11 @24823 has 1 MA's), (12, 24859), (13, 24877), (14, 24901), (15, 24919), (16, 24928), (18, 24937), (19, 24946), (20, 24949), (21, 24976), (23, 25024), (24, 25027), (25, 25033), (26, 25039), (27, 25084), (28, 25087),

Gene: Birdsong_29 Start: 23632, Stop: 23994, Start Num: 4

Candidate Starts for Birdsong_29:

(Start: 4 @23632 has 29 MA's), (5, 23638), (6, 23644), (9, 23695), (10, 23698), (Start: 11 @23716 has 1 MA's), (12, 23752), (13, 23770), (14, 23794), (15, 23812), (16, 23821), (18, 23830), (19, 23839), (20, 23842), (21, 23869), (23, 23917), (24, 23920), (25, 23926), (26, 23932), (27, 23977), (28, 23980),

Gene: BotCity_31 Start: 23519, Stop: 23881, Start Num: 4

Candidate Starts for BotCity_31:

(Start: 4 @23519 has 29 MA's), (8, 23564), (10, 23585), (Start: 11 @23603 has 1 MA's), (12, 23639), (13, 23657), (14, 23681), (19, 23726), (20, 23729), (21, 23756), (22, 23783), (24, 23807), (25, 23813), (26, 23819), (27, 23864), (28, 23867),

Gene: Budski_30 Start: 24058, Stop: 24420, Start Num: 4

Candidate Starts for Budski_30:

(Start: 4 @24058 has 29 MA's), (5, 24064), (6, 24070), (9, 24121), (10, 24124), (Start: 11 @24142 has 1 MA's), (12, 24178), (13, 24196), (14, 24220), (15, 24238), (16, 24247), (17, 24250), (18, 24256), (19, 24265), (20, 24268), (21, 24295), (24, 24346), (25, 24352), (26, 24358), (27, 24403), (28, 24406),

Gene: Crater_28 Start: 23511, Stop: 23873, Start Num: 4

Candidate Starts for Crater_28:

(Start: 4 @23511 has 29 MA's), (5, 23517), (6, 23523), (9, 23574), (10, 23577), (Start: 11 @23595 has 1 MA's), (12, 23631), (13, 23649), (14, 23673), (15, 23691), (16, 23700), (18, 23709), (19, 23718), (20, 23721), (21, 23748), (24, 23799), (25, 23805), (26, 23811), (27, 23856), (28, 23859),

Gene: Ecliptus_33 Start: 25566, Stop: 25844, Start Num: 11

Candidate Starts for Ecliptus_33:

(Start: 11 @25566 has 1 MA's), (12, 25602), (13, 25620), (14, 25644), (15, 25662), (19, 25689), (20, 25692), (21, 25719), (22, 25746), (24, 25770), (25, 25776), (26, 25782), (27, 25827), (28, 25830),

Gene: Frickyeah_29 Start: 23716, Stop: 24078, Start Num: 4

Candidate Starts for Frickyeah_29:

(Start: 4 @23716 has 29 MA's), (5, 23722), (6, 23728), (9, 23779), (10, 23782), (Start: 11 @23800 has 1 MA's), (12, 23836), (13, 23854), (14, 23878), (15, 23896), (16, 23905), (18, 23914), (19, 23923), (20,

23926), (21, 23953), (23, 24001), (24, 24004), (25, 24010), (26, 24016), (27, 24061), (28, 24064),

Gene: Getalong_31 Start: 24753, Stop: 25115, Start Num: 4

Candidate Starts for Getalong_31:

(Start: 4 @24753 has 29 MA's), (5, 24759), (6, 24765), (9, 24816), (10, 24819), (Start: 11 @24837 has 1 MA's), (12, 24873), (13, 24891), (14, 24915), (15, 24933), (16, 24942), (17, 24945), (18, 24951), (19, 24960), (20, 24963), (21, 24990), (24, 25041), (25, 25047), (26, 25053), (27, 25098), (28, 25101),

Gene: Heinz_26 Start: 21267, Stop: 21635, Start Num: 4

Candidate Starts for Heinz_26:

(Start: 4 @21267 has 29 MA's), (10, 21336), (21, 21498), (25, 21555), (26, 21561), (27, 21606),

Gene: Hibiscus_26 Start: 21215, Stop: 21583, Start Num: 4

Candidate Starts for Hibiscus_26:

(Start: 4 @21215 has 29 MA's), (10, 21284), (21, 21446), (25, 21503), (26, 21509), (27, 21554),

Gene: Holliday_30 Start: 24058, Stop: 24420, Start Num: 4

Candidate Starts for Holliday_30:

(Start: 4 @24058 has 29 MA's), (5, 24064), (6, 24070), (9, 24121), (10, 24124), (Start: 11 @24142 has 1 MA's), (12, 24178), (13, 24196), (14, 24220), (15, 24238), (19, 24265), (20, 24268), (21, 24295), (22, 24322), (24, 24346), (25, 24352), (26, 24358), (27, 24403), (28, 24406),

Gene: Horus_30 Start: 23975, Stop: 24337, Start Num: 4

Candidate Starts for Horus_30:

(Start: 4 @23975 has 29 MA's), (5, 23981), (6, 23987), (9, 24038), (10, 24041), (Start: 11 @24059 has 1 MA's), (12, 24095), (13, 24113), (14, 24137), (15, 24155), (16, 24164), (18, 24173), (19, 24182), (20, 24185), (21, 24212), (23, 24260), (24, 24263), (25, 24269), (26, 24275), (27, 24320), (28, 24323),

Gene: Kamaru_30 Start: 24058, Stop: 24420, Start Num: 4

Candidate Starts for Kamaru_30:

(Start: 4 @24058 has 29 MA's), (5, 24064), (6, 24070), (9, 24121), (10, 24124), (Start: 11 @24142 has 1 MA's), (12, 24178), (13, 24196), (14, 24220), (15, 24238), (19, 24265), (20, 24268), (21, 24295), (22, 24322), (24, 24346), (25, 24352), (26, 24358), (27, 24403), (28, 24406),

Gene: Kenna_29 Start: 23951, Stop: 24313, Start Num: 4

Candidate Starts for Kenna_29:

(1, 23852), (2, 23855), (Start: 4 @23951 has 29 MA's), (5, 23957), (6, 23963), (9, 24014), (10, 24017), (Start: 11 @24035 has 1 MA's), (12, 24071), (13, 24089), (14, 24113), (15, 24131), (19, 24158), (20, 24161), (21, 24188), (24, 24239), (25, 24245), (26, 24251), (27, 24296), (28, 24299),

Gene: Kuwabara_29 Start: 23326, Stop: 23688, Start Num: 4

Candidate Starts for Kuwabara_29:

(Start: 4 @23326 has 29 MA's), (5, 23332), (6, 23338), (9, 23389), (10, 23392), (Start: 11 @23410 has 1 MA's), (12, 23446), (13, 23464), (14, 23488), (15, 23506), (16, 23515), (18, 23524), (19, 23533), (20, 23536), (21, 23563), (23, 23611), (24, 23614), (25, 23620), (26, 23626), (27, 23671), (28, 23674),

Gene: Leroy_30 Start: 23976, Stop: 24338, Start Num: 4

Candidate Starts for Leroy_30:

(Start: 4 @23976 has 29 MA's), (5, 23982), (6, 23988), (9, 24039), (10, 24042), (Start: 11 @24060 has 1 MA's), (12, 24096), (13, 24114), (14, 24138), (15, 24156), (16, 24165), (18, 24174), (19, 24183), (20, 24186), (21, 24213), (23, 24261), (24, 24264), (25, 24270), (26, 24276), (27, 24321), (28, 24324),

Gene: LitninMcQueen_29 Start: 23707, Stop: 24069, Start Num: 4

Candidate Starts for LitninMcQueen_29:

(Start: 4 @23707 has 29 MA's), (5, 23713), (6, 23719), (9, 23770), (10, 23773), (Start: 11 @23791 has 1 MA's), (12, 23827), (14, 23869), (15, 23887), (16, 23896), (17, 23899), (19, 23914), (20, 23917), (21, 23944), (22, 23971), (24, 23995), (25, 24001), (26, 24007), (27, 24052), (28, 24055),

Gene: Lutum_30 Start: 23951, Stop: 24313, Start Num: 4

Candidate Starts for Lutum_30:

(1, 23852), (2, 23855), (Start: 4 @23951 has 29 MA's), (5, 23957), (6, 23963), (9, 24014), (10, 24017), (Start: 11 @24035 has 1 MA's), (12, 24071), (13, 24089), (14, 24113), (15, 24131), (19, 24158), (20, 24161), (21, 24188), (24, 24239), (25, 24245), (26, 24251), (27, 24296), (28, 24299),

Gene: MortyNRick_29 Start: 23632, Stop: 23994, Start Num: 4

Candidate Starts for MortyNRick_29:

(Start: 4 @23632 has 29 MA's), (5, 23638), (6, 23644), (9, 23695), (10, 23698), (Start: 11 @23716 has 1 MA's), (12, 23752), (13, 23770), (14, 23794), (15, 23812), (16, 23821), (18, 23830), (19, 23839), (20, 23842), (21, 23869), (23, 23917), (24, 23920), (25, 23926), (26, 23932), (27, 23977), (28, 23980),

Gene: ODay_34 Start: 25778, Stop: 26140, Start Num: 4

Candidate Starts for ODay_34:

(Start: 4 @25778 has 29 MA's), (5, 25784), (6, 25790), (9, 25841), (10, 25844), (Start: 11 @25862 has 1 MA's), (12, 25898), (13, 25916), (14, 25940), (15, 25958), (16, 25967), (18, 25976), (19, 25985), (20, 25988), (21, 26015), (22, 26042), (24, 26066), (25, 26072), (26, 26078), (27, 26123), (28, 26126),

Gene: Periwinkle_32 Start: 24420, Stop: 24782, Start Num: 4

Candidate Starts for Periwinkle_32:

(Start: 4 @24420 has 29 MA's), (5, 24426), (6, 24432), (9, 24483), (10, 24486), (Start: 11 @24504 has 1 MA's), (12, 24540), (13, 24558), (14, 24582), (15, 24600), (16, 24609), (18, 24618), (19, 24627), (20, 24630), (21, 24657), (23, 24705), (24, 24708), (25, 24714), (26, 24720), (27, 24765), (28, 24768),

Gene: Phabuloso_29 Start: 23707, Stop: 24069, Start Num: 4

Candidate Starts for Phabuloso_29:

(Start: 4 @23707 has 29 MA's), (5, 23713), (6, 23719), (9, 23770), (10, 23773), (Start: 11 @23791 has 1 MA's), (12, 23827), (13, 23845), (14, 23869), (15, 23887), (19, 23914), (20, 23917), (21, 23944), (24, 23995), (25, 24001), (26, 24007), (27, 24052), (28, 24055),

Gene: Phistory_31 Start: 24741, Stop: 25103, Start Num: 4

Candidate Starts for Phistory_31:

(Start: 4 @24741 has 29 MA's), (5, 24747), (6, 24753), (9, 24804), (10, 24807), (Start: 11 @24825 has 1 MA's), (12, 24861), (13, 24879), (14, 24903), (15, 24921), (16, 24930), (18, 24939), (19, 24948), (20, 24951), (21, 24978), (23, 25026), (24, 25029), (25, 25035), (26, 25041), (27, 25086), (28, 25089),

Gene: Santhid_26 Start: 21396, Stop: 21764, Start Num: 4

Candidate Starts for Santhid_26:

(3, 21303), (Start: 4 @21396 has 29 MA's), (10, 21465), (21, 21627), (25, 21684), (26, 21690), (27, 21735),

Gene: ShawBrad_30 Start: 23963, Stop: 24325, Start Num: 4

Candidate Starts for ShawBrad_30:

(Start: 4 @23963 has 29 MA's), (7, 24002), (9, 24026), (10, 24029), (Start: 11 @24047 has 1 MA's), (12, 24083), (14, 24125), (18, 24161), (19, 24170), (20, 24173), (21, 24200), (24, 24251), (25, 24257), (26, 24263), (27, 24308), (28, 24311),

Gene: Suerte_25 Start: 23182, Stop: 23538, Start Num: 4

Candidate Starts for Suerte_25:

(Start: 4 @23182 has 29 MA's), (25, 23470), (26, 23476), (27, 23521),

Gene: Thimann_27 Start: 23650, Stop: 24006, Start Num: 4

Candidate Starts for Thimann_27:

(Start: 4 @23650 has 29 MA's), (25, 23938), (26, 23944), (27, 23989),

Gene: Whitney_31 Start: 24862, Stop: 25224, Start Num: 4

Candidate Starts for Whitney_31:

(Start: 4 @24862 has 29 MA's), (5, 24868), (6, 24874), (9, 24925), (10, 24928), (Start: 11 @24946 has 1 MA's), (12, 24982), (13, 25000), (14, 25024), (15, 25042), (16, 25051), (17, 25054), (18, 25060), (19, 25069), (20, 25072), (21, 25099), (24, 25150), (25, 25156), (26, 25162), (27, 25207), (28, 25210),