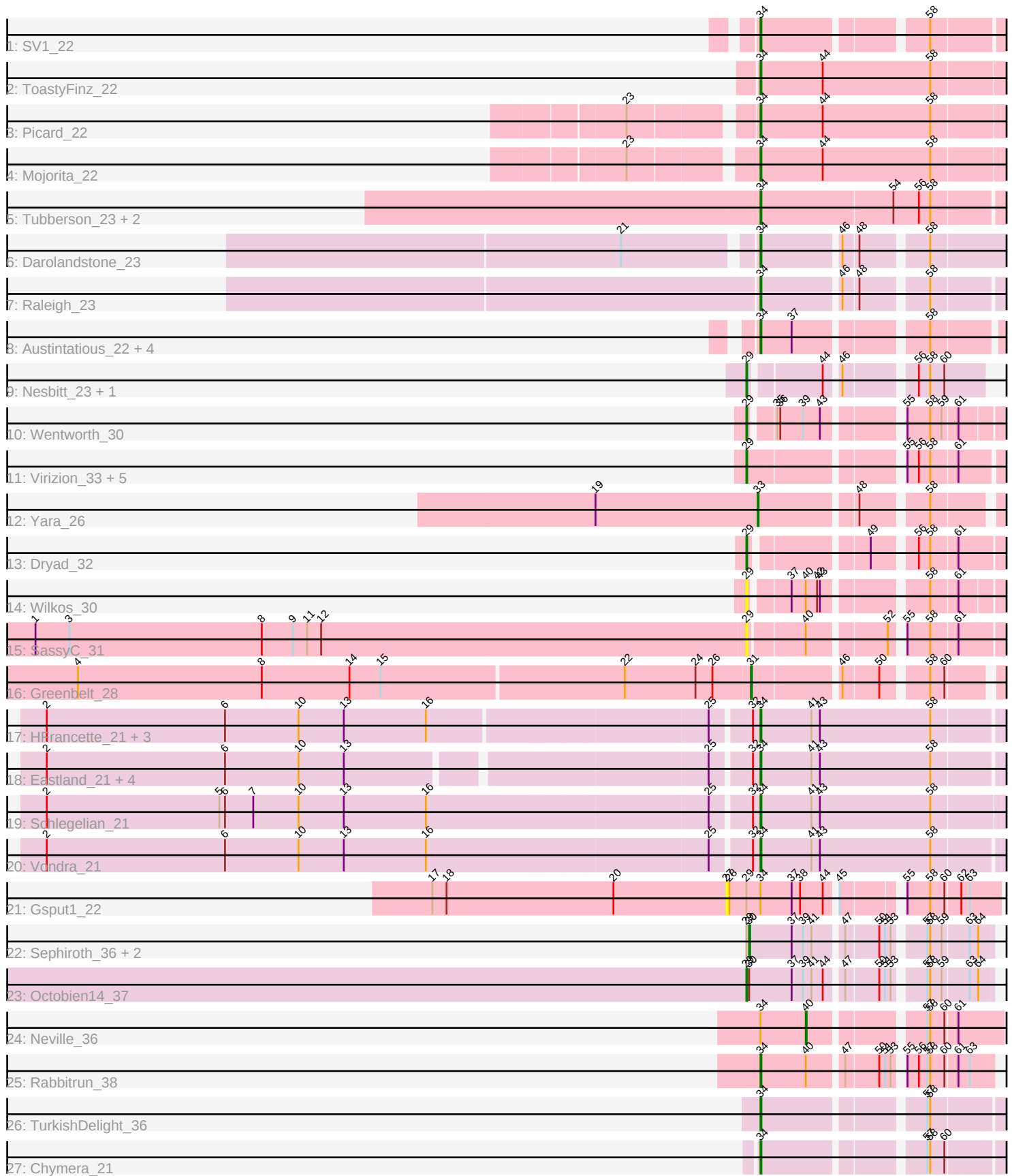




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 280546 Report

This analysis was run 02/07/26 on database version 634.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 280546 has 48 members, 5 are drafts.

Phages represented in each track:

- Track 1 : SV1_22
- Track 2 : ToastyFinz_22
- Track 3 : Picard_22
- Track 4 : Mojorita_22
- Track 5 : Tubberson_23, SoJo_23, DaRealMyers_23
- Track 6 : Darolandstone_23
- Track 7 : Raleigh_23
- Track 8 : Austintatious_22, Bioscum_22, Ididsumtinwong_22, Lishka_22, PapayaSalad_22
- Track 9 : Nesbitt_23, AbbeyMikolon_23
- Track 10 : Wentworth_30
- Track 11 : Virizion_33, PHTowN_29, Rooney_29, ShakeNBake_29, Lizz_29, Gibson_29
- Track 12 : Yara_26
- Track 13 : Dryad_32
- Track 14 : Wilkos_30
- Track 15 : SassyC_31
- Track 16 : Greenbelt_28
- Track 17 : HFrancette_21, Cumberbatch_21, Ignacio_21, ArizonaGT_21
- Track 18 : Eastland_21, AxeJC_21, Eklok_21, Piccadilly_21, FrumpyGal_21
- Track 19 : Schlegelian_21
- Track 20 : Vondra_21
- Track 21 : Gsput1_22
- Track 22 : Sephiroth_36, Syleon_36, Kudrefre_35
- Track 23 : Octobien14_37
- Track 24 : Neville_36
- Track 25 : Rabbitrun_38
- Track 26 : TurkishDelight_36
- Track 27 : Chymera_21

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

The start number called the most often in the published annotations is 34, it was called in 27 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT_21, Austintatious_22, AxeJC_21, Bioscum_22, Chymera_21, Cumberbatch_21, DaRealMyers_23, Darolandstone_23, Eastland_21, Eklok_21, FrumpyGal_21, HFrancette_21, Ididsumtinwong_22, Ignacio_21, Lishka_22, Moajorita_22, PapayaSalad_22, Picard_22, Piccadilly_21, Rabbitrun_38, Raleigh_23, SV1_22, Schlegelian_21, SoJo_23, ToastyFinz_22, Tubberson_23, TurkishDelight_36, Vondra_21,

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

- Gsput1_22, Neville_36,

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

- AbbeyMikolon_23, Dryad_32, Gibson_29, Greenbelt_28, Kudrefre_35, Lizz_29, Nesbitt_23, Octobien14_37, PHTowN_29, Rooney_29, SassyC_31, Sephiroth_36, ShakeNBake_29, Syleon_36, Virizion_33, Wentworth_30, Wilkos_30, Yara_26,

Summary by start number:

Start 27:

- Found in 1 of 48 (2.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1_22 (CU2),

Start 29:

- Found in 17 of 48 (35.4%) of genes in pham
- Manual Annotations of this start: 10 of 43
- Called 76.5% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_23 (BL), Dryad_32 (BN), Gibson_29 (BN), Lizz_29 (BN), Nesbitt_23 (BL), Octobien14_37 (DU1), PHTowN_29 (BN), Rooney_29 (BN), SassyC_31 (BN), ShakeNBake_29 (BN), Virizion_33 (BN), Wentworth_30 (BN), Wilkos_30 (BN),

Start 30:

- Found in 4 of 48 (8.3%) of genes in pham
- Manual Annotations of this start: 3 of 43
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Kudrefre_35 (DU1), Sephiroth_36 (DU1), Syleon_36 (DU1),

Start 31:

- Found in 1 of 48 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greenbelt_28 (BN),

Start 33:

- Found in 1 of 48 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 43

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yara_26 (BN),

Start 34:

- Found in 30 of 48 (62.5%) of genes in pham
- Manual Annotations of this start: 27 of 43
- Called 93.3% of time when present
- Phage (with cluster) where this start called: ArizonaGT_21 (BP), Austintatious_22 (BC3), AxeJC_21 (BP), Bioscum_22 (BC3), Chymera_21 (singleton), Cumberbatch_21 (BP), DaRealMyers_23 (BC1), Darolandstone_23 (BC2), Eastland_21 (BP), Eklok_21 (BP), FrumpyGal_21 (BP), HFrancette_21 (BP), Ididsumtinwong_22 (BC3), Ignacio_21 (BP), Lishka_22 (BC3), Mojorita_22 (BC1), PapayaSalad_22 (BC3), Picard_22 (BC1), Piccadilly_21 (BP), Rabbitrun_38 (DU2), Raleigh_23 (BC2), SV1_22 (BC1), Schlegelian_21 (BP), SoJo_23 (BC1), ToastyFinz_22 (BC1), Tubberson_23 (BC1), TurkishDelight_36 (singleton), Vondra_21 (BP),

Start 40:

- Found in 4 of 48 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Neville_36 (DU2),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, CU2, BL, BN, BP, DU1, DU2, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 34 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 34 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 34 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BL:

- Start number 29 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster BN:

- Start number 29 was manually annotated 7 times for cluster BN.
- Start number 31 was manually annotated 1 time for cluster BN.
- Start number 33 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BP:

- Start number 34 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster DU1:

- Start number 29 was manually annotated 1 time for cluster DU1.
- Start number 30 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 34 was manually annotated 1 time for cluster DU2.
- Start number 40 was manually annotated 1 time for cluster DU2.

Gene Information:

Gene: AbbeyMikolon_23 Start: 18386, Stop: 18598, Start Num: 29

Candidate Starts for AbbeyMikolon_23:

(Start: 29 @18386 has 10 MA's), (44, 18452), (46, 18464), (56, 18530), (58, 18542), (60, 18557),

Gene: ArizonaGT_21 Start: 17942, Stop: 18202, Start Num: 34

Candidate Starts for ArizonaGT_21:

(2, 17210), (6, 17399), (10, 17477), (13, 17525), (16, 17612), (25, 17897), (32, 17936), (Start: 34 @17942 has 27 MA's), (41, 17996), (43, 18005), (58, 18122),

Gene: Austintatious_22 Start: 17098, Stop: 17331, Start Num: 34

Candidate Starts for Austintatious_22:

(Start: 34 @17098 has 27 MA's), (37, 17131), (58, 17254),

Gene: AxeJC_21 Start: 17926, Stop: 18183, Start Num: 34

Candidate Starts for AxeJC_21:

(2, 17209), (6, 17398), (10, 17476), (13, 17524), (25, 17881), (32, 17920), (Start: 34 @17926 has 27 MA's), (41, 17980), (43, 17989), (58, 18106),

Gene: Bioscum_22 Start: 17134, Stop: 17367, Start Num: 34

Candidate Starts for Bioscum_22:

(Start: 34 @17134 has 27 MA's), (37, 17167), (58, 17290),

Gene: Chymera_21 Start: 17166, Stop: 17393, Start Num: 34

Candidate Starts for Chymera_21:

(Start: 34 @17166 has 27 MA's), (57, 17319), (58, 17322), (60, 17337),

Gene: Cumberbatch_21 Start: 17942, Stop: 18202, Start Num: 34

Candidate Starts for Cumberbatch_21:

(2, 17210), (6, 17399), (10, 17477), (13, 17525), (16, 17612), (25, 17897), (32, 17936), (Start: 34 @17942 has 27 MA's), (41, 17996), (43, 18005), (58, 18122),

Gene: DaRealMyers_23 Start: 19333, Stop: 19587, Start Num: 34

Candidate Starts for DaRealMyers_23:

(Start: 34 @19333 has 27 MA's), (54, 19471), (56, 19498), (58, 19510),

Gene: Darolandstone_23 Start: 19517, Stop: 19762, Start Num: 34

Candidate Starts for Darolandstone_23:

(21, 19388), (Start: 34 @19517 has 27 MA's), (46, 19595), (48, 19610), (58, 19673),

Gene: Dryad_32 Start: 21653, Stop: 21880, Start Num: 29

Candidate Starts for Dryad_32:

(Start: 29 @21653 has 10 MA's), (49, 21758), (56, 21797), (58, 21809), (61, 21836),

Gene: Eastland_21 Start: 17911, Stop: 18168, Start Num: 34

Candidate Starts for Eastland_21:

(2, 17194), (6, 17383), (10, 17461), (13, 17509), (25, 17866), (32, 17905), (Start: 34 @17911 has 27 MA's), (41, 17965), (43, 17974), (58, 18091),

Gene: Eklok_21 Start: 17926, Stop: 18183, Start Num: 34

Candidate Starts for Eklok_21:

(2, 17209), (6, 17398), (10, 17476), (13, 17524), (25, 17881), (32, 17920), (Start: 34 @17926 has 27 MA's), (41, 17980), (43, 17989), (58, 18106),

Gene: FrumpyGal_21 Start: 17911, Stop: 18168, Start Num: 34

Candidate Starts for FrumpyGal_21:

(2, 17194), (6, 17383), (10, 17461), (13, 17509), (25, 17866), (32, 17905), (Start: 34 @17911 has 27 MA's), (41, 17965), (43, 17974), (58, 18091),

Gene: Gibson_29 Start: 20816, Stop: 21049, Start Num: 29

Candidate Starts for Gibson_29:

(Start: 29 @20816 has 10 MA's), (55, 20957), (56, 20969), (58, 20981), (61, 21008),

Gene: Greenbelt_28 Start: 20069, Stop: 20296, Start Num: 31

Candidate Starts for Greenbelt_28:

(4, 19364), (8, 19559), (14, 19652), (15, 19685), (22, 19937), (24, 20012), (26, 20030), (Start: 31 @20069 has 1 MA's), (46, 20153), (50, 20189), (58, 20231), (60, 20246),

Gene: Gspu1_22 Start: 18136, Stop: 18396, Start Num: 27

Candidate Starts for Gspu1_22:

(17, 17824), (18, 17839), (20, 18016), (27, 18136), (28, 18139), (Start: 29 @18157 has 10 MA's), (Start: 34 @18172 has 27 MA's), (37, 18205), (38, 18214), (44, 18238), (45, 18247), (55, 18301), (58, 18325), (60, 18340), (62, 18355), (63, 18364),

Gene: HFrancette_21 Start: 17957, Stop: 18214, Start Num: 34

Candidate Starts for HFrancette_21:

(2, 17225), (6, 17414), (10, 17492), (13, 17540), (16, 17627), (25, 17912), (32, 17951), (Start: 34 @17957 has 27 MA's), (41, 18011), (43, 18020), (58, 18137),

Gene: Ididsumtinwong_22 Start: 17134, Stop: 17367, Start Num: 34

Candidate Starts for Ididsumtinwong_22:

(Start: 34 @17134 has 27 MA's), (37, 17167), (58, 17290),

Gene: Ignacio_21 Start: 17957, Stop: 18214, Start Num: 34

Candidate Starts for Ignacio_21:

(2, 17225), (6, 17414), (10, 17492), (13, 17540), (16, 17627), (25, 17912), (32, 17951), (Start: 34 @17957 has 27 MA's), (41, 18011), (43, 18020), (58, 18137),

Gene: Kudefre_35 Start: 29727, Stop: 29957, Start Num: 30

Candidate Starts for Kudefre_35:

(Start: 29 @29724 has 10 MA's), (Start: 30 @29727 has 3 MA's), (37, 29772), (39, 29784), (41, 29793), (47, 29820), (50, 29853), (51, 29859), (53, 29865), (57, 29892), (58, 29895), (59, 29907), (63, 29934), (64, 29943),

Gene: Lishka_22 Start: 17098, Stop: 17331, Start Num: 34

Candidate Starts for Lishka_22:

(Start: 34 @17098 has 27 MA's), (37, 17131), (58, 17254),

Gene: Lizz_29 Start: 20625, Stop: 20858, Start Num: 29

Candidate Starts for Lizz_29:

(Start: 29 @20625 has 10 MA's), (55, 20766), (56, 20778), (58, 20790), (61, 20817),

Gene: Mojarita_22 Start: 17147, Stop: 17407, Start Num: 34

Candidate Starts for Mojarita_22:

(23, 17030), (Start: 34 @17147 has 27 MA's), (44, 17213), (58, 17327),

Gene: Nesbitt_23 Start: 18458, Stop: 18670, Start Num: 29

Candidate Starts for Nesbitt_23:

(Start: 29 @18458 has 10 MA's), (44, 18524), (46, 18536), (56, 18602), (58, 18614), (60, 18629),

Gene: Neville_36 Start: 31076, Stop: 31258, Start Num: 40

Candidate Starts for Neville_36:

(Start: 34 @31028 has 27 MA's), (Start: 40 @31076 has 1 MA's), (57, 31181), (58, 31184), (60, 31199), (61, 31211),

Gene: Octobien14_37 Start: 30411, Stop: 30644, Start Num: 29

Candidate Starts for Octobien14_37:

(Start: 29 @30411 has 10 MA's), (Start: 30 @30414 has 3 MA's), (37, 30459), (39, 30471), (41, 30480), (44, 30492), (47, 30507), (50, 30540), (51, 30546), (53, 30552), (57, 30579), (58, 30582), (59, 30594), (63, 30621), (64, 30630),

Gene: PHTown_29 Start: 20623, Stop: 20856, Start Num: 29

Candidate Starts for PHTown_29:

(Start: 29 @20623 has 10 MA's), (55, 20764), (56, 20776), (58, 20788), (61, 20815),

Gene: PapayaSalad_22 Start: 17109, Stop: 17342, Start Num: 34

Candidate Starts for PapayaSalad_22:

(Start: 34 @17109 has 27 MA's), (37, 17142), (58, 17265),

Gene: Picard_22 Start: 17138, Stop: 17398, Start Num: 34

Candidate Starts for Picard_22:

(23, 17024), (Start: 34 @17138 has 27 MA's), (44, 17204), (58, 17318),

Gene: Piccadilly_21 Start: 17910, Stop: 18167, Start Num: 34

Candidate Starts for Piccadilly_21:

(2, 17193), (6, 17382), (10, 17460), (13, 17508), (25, 17865), (32, 17904), (Start: 34 @17910 has 27 MA's), (41, 17964), (43, 17973), (58, 18090),

Gene: Rabbitrun_38 Start: 31471, Stop: 31689, Start Num: 34

Candidate Starts for Rabbitrun_38:

(Start: 34 @31471 has 27 MA's), (Start: 40 @31519 has 1 MA's), (47, 31552), (50, 31585), (51, 31591), (53, 31597), (55, 31603), (56, 31615), (57, 31624), (58, 31627), (60, 31642), (61, 31654), (63, 31666),

Gene: Raleigh_23 Start: 19748, Stop: 19987, Start Num: 34

Candidate Starts for Raleigh_23:

(Start: 34 @19748 has 27 MA's), (46, 19826), (48, 19841), (58, 19904),

Gene: Rooney_29 Start: 20813, Stop: 21046, Start Num: 29

Candidate Starts for Rooney_29:

(Start: 29 @20813 has 10 MA's), (55, 20954), (56, 20966), (58, 20978), (61, 21005),

Gene: SV1_22 Start: 17352, Stop: 17588, Start Num: 34

Candidate Starts for SV1_22:
(Start: 34 @17352 has 27 MA's), (58, 17508),

Gene: SassyC_31 Start: 20941, Stop: 21174, Start Num: 29
Candidate Starts for SassyC_31:
(1, 20191), (3, 20227), (8, 20431), (9, 20464), (11, 20479), (12, 20494), (Start: 29 @20941 has 10 MA's), (Start: 40 @20995 has 1 MA's), (52, 21070), (55, 21079), (58, 21103), (61, 21130),

Gene: Schlegelian_21 Start: 17946, Stop: 18206, Start Num: 34
Candidate Starts for Schlegelian_21:
(2, 17208), (5, 17391), (6, 17397), (7, 17427), (10, 17475), (13, 17523), (16, 17610), (25, 17901), (32, 17940), (Start: 34 @17946 has 27 MA's), (41, 18000), (43, 18009), (58, 18126),

Gene: Sephiroth_36 Start: 29898, Stop: 30128, Start Num: 30
Candidate Starts for Sephiroth_36:
(Start: 29 @29895 has 10 MA's), (Start: 30 @29898 has 3 MA's), (37, 29943), (39, 29955), (41, 29964), (47, 29991), (50, 30024), (51, 30030), (53, 30036), (57, 30063), (58, 30066), (59, 30078), (63, 30105), (64, 30114),

Gene: ShakeNBake_29 Start: 20641, Stop: 20874, Start Num: 29
Candidate Starts for ShakeNBake_29:
(Start: 29 @20641 has 10 MA's), (55, 20782), (56, 20794), (58, 20806), (61, 20833),

Gene: SoJo_23 Start: 19328, Stop: 19582, Start Num: 34
Candidate Starts for SoJo_23:
(Start: 34 @19328 has 27 MA's), (54, 19466), (56, 19493), (58, 19505),

Gene: Syleon_36 Start: 29820, Stop: 30050, Start Num: 30
Candidate Starts for Syleon_36:
(Start: 29 @29817 has 10 MA's), (Start: 30 @29820 has 3 MA's), (37, 29865), (39, 29877), (41, 29886), (47, 29913), (50, 29946), (51, 29952), (53, 29958), (57, 29985), (58, 29988), (59, 30000), (63, 30027), (64, 30036),

Gene: ToastyFinz_22 Start: 19068, Stop: 19331, Start Num: 34
Candidate Starts for ToastyFinz_22:
(Start: 34 @19068 has 27 MA's), (44, 19134), (58, 19248),

Gene: Tubberson_23 Start: 19333, Stop: 19587, Start Num: 34
Candidate Starts for Tubberson_23:
(Start: 34 @19333 has 27 MA's), (54, 19471), (56, 19498), (58, 19510),

Gene: TurkishDelight_36 Start: 34260, Stop: 34487, Start Num: 34
Candidate Starts for TurkishDelight_36:
(Start: 34 @34260 has 27 MA's), (57, 34413), (58, 34416),

Gene: Virizion_33 Start: 21012, Stop: 21245, Start Num: 29
Candidate Starts for Virizion_33:
(Start: 29 @21012 has 10 MA's), (55, 21153), (56, 21165), (58, 21177), (61, 21204),

Gene: Vondra_21 Start: 17962, Stop: 18219, Start Num: 34
Candidate Starts for Vondra_21:
(2, 17224), (6, 17413), (10, 17491), (13, 17539), (16, 17626), (25, 17917), (32, 17956), (Start: 34 @17962 has 27 MA's), (41, 18016), (43, 18025), (58, 18142),

Gene: Wentworth_30 Start: 20992, Stop: 21219, Start Num: 29

Candidate Starts for Wentworth_30:

(Start: 29 @20992 has 10 MA's), (35, 21013), (36, 21016), (39, 21040), (43, 21058), (55, 21127), (58, 21151), (59, 21163), (61, 21178),

Gene: Wilkos_30 Start: 20904, Stop: 21131, Start Num: 29

Candidate Starts for Wilkos_30:

(Start: 29 @20904 has 10 MA's), (37, 20940), (Start: 40 @20955 has 1 MA's), (42, 20967), (43, 20970), (58, 21063), (61, 21090),

Gene: Yara_26 Start: 20240, Stop: 20461, Start Num: 33

Candidate Starts for Yara_26:

(19, 20069), (Start: 33 @20240 has 1 MA's), (48, 20336), (58, 20399),