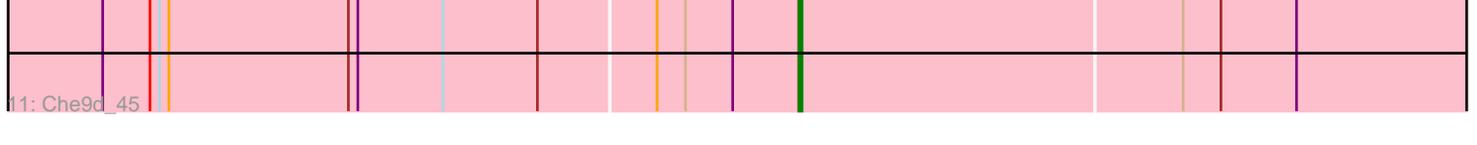
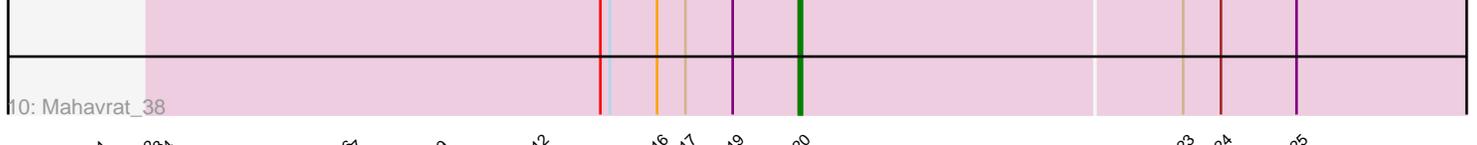
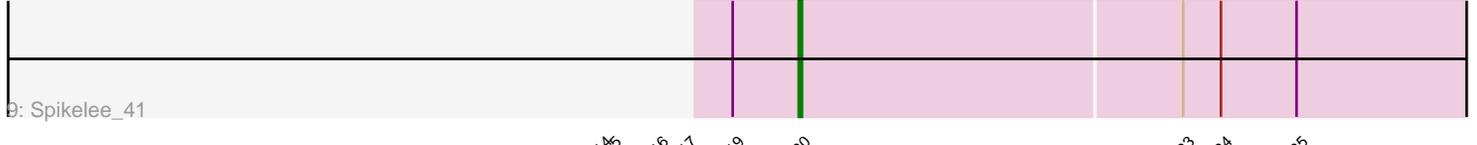
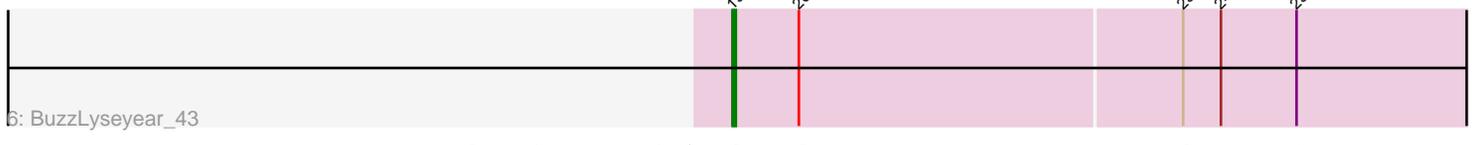
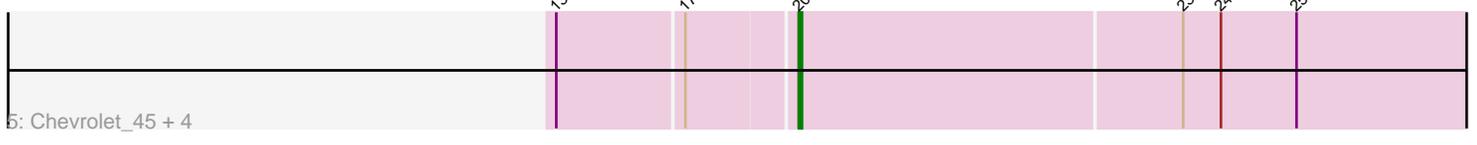
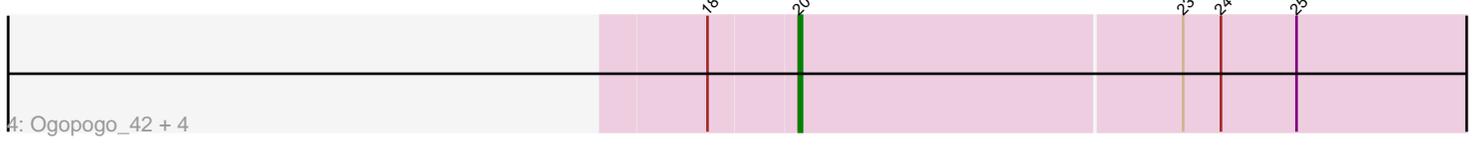
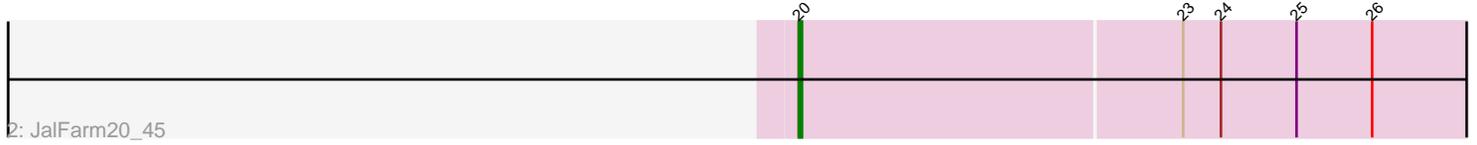
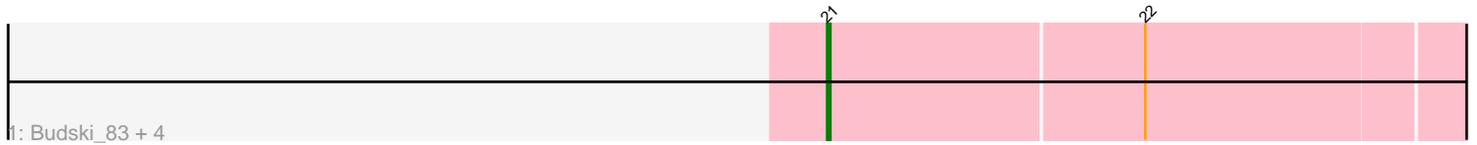


Pham 289444



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 289444 Report

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

Pham number 289444 has 57 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Budski_83, Culver_114, Crater_76, Horus_78, Phistory_75
- Track 2 : JalFarm20_45
- Track 3 : Gorge_42, Mattes_42, MisterCuddles_42, Ruby_41, Saal_42, Che8_43, James_42, Vivum_41, Zapner_49, Clank_42, BodEinwohner17_40, Demsculpinboyz_47, Girr_42, Fancypants_40, Ibhubesi_38, Firehouse51_41, Kersh_39, Juniper1_39, TDanisky_40, Kimberlium_43, Grimmer_45, Zizzle_42, Doomslug_46, Jabbawokkie_50, QuickMath_42, Wachhund_42, Harley_39, Sabbb_41, Sparkdehlily_40, DRBy19_42, Mozy_45, Latretium_41, Philus_42, DoRead_42, MulchExplorer_46
- Track 4 : Ogopogo_42, Blexus_39, Sandalphon_43, Pollywog_40, Chuckly_40
- Track 5 : Chevrolet_45, SilverChicken_48, Seagreen_39, ArcusAngelus_42, Avani_45
- Track 6 : BuzzLyseyear_43
- Track 7 : Karhdo_38
- Track 8 : ShroomBoi_37
- Track 9 : Spikelee_41
- Track 10 : Mahavrat_38
- Track 11 : Che9d_45

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

The start number called the most often in the published annotations is 20, it was called in 44 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArcusAngelus_42, Avani_45, Blexus_39, BodEinwohner17_40, Che8_43, Che9d_45, Chevrolet_45, Chuckly_40, Clank_42, DRBy19_42, Demsculpinboyz_47, DoRead_42, Doomslug_46, Fancypants_40, Firehouse51_41, Girr_42, Gorge_42, Grimmer_45, Harley_39, Ibhubesi_38, Jabbawokkie_50, JalFarm20_45, James_42, Juniper1_39, Kersh_39, Kimberlium_43, Latretium_41, Mahavrat_38, Mattes_42, MisterCuddles_42, Mozy_45, MulchExplorer_46, Ogopogo_42, Philus_42, Pollywog_40, QuickMath_42, Ruby_41, Saal_42, Sabbb_41, Sandalphon_43, Seagreen_39, SilverChicken_48, Sparkdehlily_40, Spikelee_41, TDanisky_40, Vivum_41, Wachhund_42, Zapner_49, Zizzle_42,

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

- BuzzLyseyear_43, Karhdo_38, ShroomBoi_37,

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

- Budski_83, Crater_76, Culver_114, Horus_78, Phistory_75,

Summary by start number:

Start 8:

- Found in 1 of 57 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Karhdo_38 (F1),

Start 19:

- Found in 6 of 57 (10.5%) of genes in pham
- Manual Annotations of this start: 2 of 52
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BuzzLyseyear_43 (F1), ShroomBoi_37 (F1),

Start 20:

- Found in 52 of 57 (91.2%) of genes in pham
- Manual Annotations of this start: 44 of 52
- Called 94.2% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_42 (F1), Avani_45 (F2), Blexus_39 (F1), BodEinwohner17_40 (F1), Che8_43 (F1), Che9d_45 (F2), Chevrolet_45 (F1), Chuckly_40 (F1), Clank_42 (F), DRBy19_42 (F1), Demsculpinboyz_47 (F2), DoRead_42 (F1), Doomslug_46 (F), Fancypants_40 (F1), Firehouse51_41 (F1), Girr_42 (F1), Gorge_42 (F1), Grimmer_45 (F1), Harley_39 (F1), Ibhuesi_38 (F1), Jabbawokkie_50 (F2), JalFarm20_45 (F1), James_42 (F1), Juniper1_39 (F1), Kersh_39 (F1), Kimberlium_43 (F1), Latretium_41 (F1), Mahavrat_38 (F1), Mattes_42 (F1), MisterCuddles_42 (F1), Mozy_45 (F1), MulchExplorer_46 (F1), Ogotogo_42 (F1), Philus_42 (F1), Pollywog_40 (F1), QuickMath_42 (F1), Ruby_41 (F1), Saal_42 (F1), Sabbb_41 (F1), Sandalphon_43 (F1), Seagreen_39 (F1), SilverChicken_48 (F2), Sparkdehlily_40 (F1), Spikelee_41 (F1), TDanisky_40 (F1), Vivum_41 (F1), Wachhund_42 (F1), Zapner_49 (F2), Zizzle_42 (F1),

Start 21:

- Found in 5 of 57 (8.8%) of genes in pham
- Manual Annotations of this start: 5 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski_83 (DN), Crater_76 (DN3), Culver_114 (CQ1), Horus_78 (DN1), Phistory_75 (DN1),

Summary by clusters:

There are 7 clusters represented in this pham: DN, F1, F2, F, DN1, DN3, CQ1,

Info for manual annotations of cluster CQ1:

- Start number 21 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster DN1:

- Start number 21 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 21 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster F1:

- Start number 8 was manually annotated 1 time for cluster F1.
- Start number 19 was manually annotated 2 times for cluster F1.
- Start number 20 was manually annotated 39 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 20 was manually annotated 5 times for cluster F2.

Gene Information:

Gene: ArcusAngelus_42 Start: 32923, Stop: 32687, Start Num: 20

Candidate Starts for ArcusAngelus_42:

(13, 32995), (17, 32956), (Start: 20 @32923 has 44 MA's), (23, 32803), (24, 32791), (25, 32767),

Gene: Avani_45 Start: 30691, Stop: 30455, Start Num: 20

Candidate Starts for Avani_45:

(13, 30763), (17, 30724), (Start: 20 @30691 has 44 MA's), (23, 30571), (24, 30559), (25, 30535),

Gene: Blexus_39 Start: 31374, Stop: 31138, Start Num: 20

Candidate Starts for Blexus_39:

(18, 31401), (Start: 20 @31374 has 44 MA's), (23, 31254), (24, 31242), (25, 31218),

Gene: BodEinwohner17_40 Start: 31558, Stop: 31322, Start Num: 20

Candidate Starts for BodEinwohner17_40:

(Start: 20 @31558 has 44 MA's), (23, 31438), (24, 31426), (25, 31402),

Gene: Budski_83 Start: 46457, Stop: 46678, Start Num: 21

Candidate Starts for Budski_83:

(Start: 21 @46457 has 5 MA's), (22, 46556),

Gene: BuzzLyseyear_43 Start: 31979, Stop: 31722, Start Num: 19

Candidate Starts for BuzzLyseyear_43:

(Start: 19 @31979 has 2 MA's), (Start: 20 @31958 has 44 MA's), (23, 31838), (24, 31826), (25, 31802),

Gene: Che8_43 Start: 32187, Stop: 31951, Start Num: 20

Candidate Starts for Che8_43:

(Start: 20 @32187 has 44 MA's), (23, 32067), (24, 32055), (25, 32031),

Gene: Che9d_45 Start: 30613, Stop: 30377, Start Num: 20

Candidate Starts for Che9d_45:

(1, 30832), (2, 30817), (3, 30814), (4, 30811), (6, 30754), (7, 30751), (9, 30724), (12, 30694), (16, 30658), (17, 30649), (Start: 19 @30634 has 2 MA's), (Start: 20 @30613 has 44 MA's), (23, 30493), (24, 30481), (25, 30457),

Gene: Chevrolet_45 Start: 32924, Stop: 32688, Start Num: 20

Candidate Starts for Chevrolet_45:

(13, 32996), (17, 32957), (Start: 20 @32924 has 44 MA's), (23, 32804), (24, 32792), (25, 32768),

Gene: Chuckly_40 Start: 31340, Stop: 31104, Start Num: 20

Candidate Starts for Chuckly_40:

(18, 31367), (Start: 20 @31340 has 44 MA's), (23, 31220), (24, 31208), (25, 31184),

Gene: Clank_42 Start: 31799, Stop: 31563, Start Num: 20

Candidate Starts for Clank_42:

(Start: 20 @31799 has 44 MA's), (23, 31679), (24, 31667), (25, 31643),

Gene: Crater_76 Start: 44152, Stop: 44367, Start Num: 21

Candidate Starts for Crater_76:

(Start: 21 @44152 has 5 MA's), (22, 44251),

Gene: Culver_114 Start: 65117, Stop: 65332, Start Num: 21

Candidate Starts for Culver_114:

(Start: 21 @65117 has 5 MA's), (22, 65216),

Gene: DRBy19_42 Start: 31628, Stop: 31392, Start Num: 20

Candidate Starts for DRBy19_42:

(Start: 20 @31628 has 44 MA's), (23, 31508), (24, 31496), (25, 31472),

Gene: Demsculpinboyz_47 Start: 30539, Stop: 30303, Start Num: 20

Candidate Starts for Demsculpinboyz_47:

(Start: 20 @30539 has 44 MA's), (23, 30419), (24, 30407), (25, 30383),

Gene: DoRead_42 Start: 31766, Stop: 31530, Start Num: 20

Candidate Starts for DoRead_42:

(Start: 20 @31766 has 44 MA's), (23, 31646), (24, 31634), (25, 31610),

Gene: Doomslug_46 Start: 31361, Stop: 31125, Start Num: 20

Candidate Starts for Doomslug_46:

(Start: 20 @31361 has 44 MA's), (23, 31241), (24, 31229), (25, 31205),

Gene: Fancypants_40 Start: 31796, Stop: 31560, Start Num: 20

Candidate Starts for Fancypants_40:

(Start: 20 @31796 has 44 MA's), (23, 31676), (24, 31664), (25, 31640),

Gene: Firehouse51_41 Start: 32944, Stop: 32708, Start Num: 20

Candidate Starts for Firehouse51_41:

(Start: 20 @32944 has 44 MA's), (23, 32824), (24, 32812), (25, 32788),

Gene: Girr_42 Start: 32208, Stop: 31972, Start Num: 20

Candidate Starts for Girr_42:

(Start: 20 @32208 has 44 MA's), (23, 32088), (24, 32076), (25, 32052),

Gene: Gorge_42 Start: 31762, Stop: 31526, Start Num: 20

Candidate Starts for Gorge_42:
(Start: 20 @31762 has 44 MA's), (23, 31642), (24, 31630), (25, 31606),

Gene: Grimmer_45 Start: 32345, Stop: 32109, Start Num: 20
Candidate Starts for Grimmer_45:
(Start: 20 @32345 has 44 MA's), (23, 32225), (24, 32213), (25, 32189),

Gene: Harley_39 Start: 30891, Stop: 30655, Start Num: 20
Candidate Starts for Harley_39:
(Start: 20 @30891 has 44 MA's), (23, 30771), (24, 30759), (25, 30735),

Gene: Horus_78 Start: 46219, Stop: 46434, Start Num: 21
Candidate Starts for Horus_78:
(Start: 21 @46219 has 5 MA's), (22, 46318),

Gene: Ibhubesi_38 Start: 30898, Stop: 30662, Start Num: 20
Candidate Starts for Ibhubesi_38:
(Start: 20 @30898 has 44 MA's), (23, 30778), (24, 30766), (25, 30742),

Gene: Jabbawokkie_50 Start: 31869, Stop: 31633, Start Num: 20
Candidate Starts for Jabbawokkie_50:
(Start: 20 @31869 has 44 MA's), (23, 31749), (24, 31737), (25, 31713),

Gene: JalFarm20_45 Start: 32993, Stop: 32757, Start Num: 20
Candidate Starts for JalFarm20_45:
(Start: 20 @32993 has 44 MA's), (23, 32873), (24, 32861), (25, 32837), (26, 32813),

Gene: James_42 Start: 31719, Stop: 31483, Start Num: 20
Candidate Starts for James_42:
(Start: 20 @31719 has 44 MA's), (23, 31599), (24, 31587), (25, 31563),

Gene: Juniper1_39 Start: 31305, Stop: 31069, Start Num: 20
Candidate Starts for Juniper1_39:
(Start: 20 @31305 has 44 MA's), (23, 31185), (24, 31173), (25, 31149),

Gene: Karhdo_38 Start: 31424, Stop: 31068, Start Num: 8
Candidate Starts for Karhdo_38:
(Start: 8 @31424 has 1 MA's), (10, 31409), (11, 31388), (15, 31364), (16, 31349), (17, 31340), (Start:
19 @31325 has 2 MA's), (Start: 20 @31304 has 44 MA's), (23, 31184), (24, 31172), (25, 31148),

Gene: Kersh_39 Start: 32742, Stop: 32506, Start Num: 20
Candidate Starts for Kersh_39:
(Start: 20 @32742 has 44 MA's), (23, 32622), (24, 32610), (25, 32586),

Gene: Kimberlium_43 Start: 32558, Stop: 32322, Start Num: 20
Candidate Starts for Kimberlium_43:
(Start: 20 @32558 has 44 MA's), (23, 32438), (24, 32426), (25, 32402),

Gene: Latretium_41 Start: 32310, Stop: 32074, Start Num: 20
Candidate Starts for Latretium_41:
(Start: 20 @32310 has 44 MA's), (23, 32190), (24, 32178), (25, 32154),

Gene: Mahavrat_38 Start: 30964, Stop: 30728, Start Num: 20

Candidate Starts for Mahavrat_38:

(14, 31027), (15, 31024), (16, 31009), (17, 31000), (Start: 19 @30985 has 2 MA's), (Start: 20 @30964 has 44 MA's), (23, 30844), (24, 30832), (25, 30808),

Gene: Mattes_42 Start: 31719, Stop: 31483, Start Num: 20

Candidate Starts for Mattes_42:

(Start: 20 @31719 has 44 MA's), (23, 31599), (24, 31587), (25, 31563),

Gene: MisterCuddles_42 Start: 32208, Stop: 31972, Start Num: 20

Candidate Starts for MisterCuddles_42:

(Start: 20 @32208 has 44 MA's), (23, 32088), (24, 32076), (25, 32052),

Gene: Mozy_45 Start: 33228, Stop: 32992, Start Num: 20

Candidate Starts for Mozy_45:

(Start: 20 @33228 has 44 MA's), (23, 33108), (24, 33096), (25, 33072),

Gene: MulchExplorer_46 Start: 32557, Stop: 32321, Start Num: 20

Candidate Starts for MulchExplorer_46:

(Start: 20 @32557 has 44 MA's), (23, 32437), (24, 32425), (25, 32401),

Gene: Ogopogo_42 Start: 30884, Stop: 30648, Start Num: 20

Candidate Starts for Ogopogo_42:

(18, 30911), (Start: 20 @30884 has 44 MA's), (23, 30764), (24, 30752), (25, 30728),

Gene: Philus_42 Start: 31604, Stop: 31368, Start Num: 20

Candidate Starts for Philus_42:

(Start: 20 @31604 has 44 MA's), (23, 31484), (24, 31472), (25, 31448),

Gene: Phistory_75 Start: 43317, Stop: 43532, Start Num: 21

Candidate Starts for Phistory_75:

(Start: 21 @43317 has 5 MA's), (22, 43416),

Gene: Pollywog_40 Start: 31496, Stop: 31260, Start Num: 20

Candidate Starts for Pollywog_40:

(18, 31523), (Start: 20 @31496 has 44 MA's), (23, 31376), (24, 31364), (25, 31340),

Gene: QuickMath_42 Start: 32781, Stop: 32545, Start Num: 20

Candidate Starts for QuickMath_42:

(Start: 20 @32781 has 44 MA's), (23, 32661), (24, 32649), (25, 32625),

Gene: Ruby_41 Start: 32208, Stop: 31972, Start Num: 20

Candidate Starts for Ruby_41:

(Start: 20 @32208 has 44 MA's), (23, 32088), (24, 32076), (25, 32052),

Gene: Saal_42 Start: 31582, Stop: 31346, Start Num: 20

Candidate Starts for Saal_42:

(Start: 20 @31582 has 44 MA's), (23, 31462), (24, 31450), (25, 31426),

Gene: Sabbb_41 Start: 31931, Stop: 31695, Start Num: 20

Candidate Starts for Sabbb_41:

(Start: 20 @31931 has 44 MA's), (23, 31811), (24, 31799), (25, 31775),

Gene: Sandalphon_43 Start: 32312, Stop: 32076, Start Num: 20

Candidate Starts for Sandalphon_43:

(18, 32339), (Start: 20 @32312 has 44 MA's), (23, 32192), (24, 32180), (25, 32156),

Gene: Seagreen_39 Start: 31076, Stop: 30840, Start Num: 20

Candidate Starts for Seagreen_39:

(13, 31148), (17, 31109), (Start: 20 @31076 has 44 MA's), (23, 30956), (24, 30944), (25, 30920),

Gene: ShroomBoi_37 Start: 30533, Stop: 30276, Start Num: 19

Candidate Starts for ShroomBoi_37:

(2, 30716), (3, 30713), (4, 30710), (5, 30689), (6, 30653), (7, 30650), (9, 30623), (12, 30593), (16, 30557), (17, 30548), (Start: 19 @30533 has 2 MA's), (Start: 20 @30512 has 44 MA's), (23, 30392), (24, 30380), (25, 30356),

Gene: SilverChicken_48 Start: 31627, Stop: 31391, Start Num: 20

Candidate Starts for SilverChicken_48:

(13, 31699), (17, 31660), (Start: 20 @31627 has 44 MA's), (23, 31507), (24, 31495), (25, 31471),

Gene: Sparkdehlily_40 Start: 31527, Stop: 31291, Start Num: 20

Candidate Starts for Sparkdehlily_40:

(Start: 20 @31527 has 44 MA's), (23, 31407), (24, 31395), (25, 31371),

Gene: Spikelee_41 Start: 31416, Stop: 31180, Start Num: 20

Candidate Starts for Spikelee_41:

(Start: 19 @31437 has 2 MA's), (Start: 20 @31416 has 44 MA's), (23, 31296), (24, 31284), (25, 31260),

Gene: TDanisky_40 Start: 31527, Stop: 31291, Start Num: 20

Candidate Starts for TDanisky_40:

(Start: 20 @31527 has 44 MA's), (23, 31407), (24, 31395), (25, 31371),

Gene: Vivum_41 Start: 31427, Stop: 31191, Start Num: 20

Candidate Starts for Vivum_41:

(Start: 20 @31427 has 44 MA's), (23, 31307), (24, 31295), (25, 31271),

Gene: Wachhund_42 Start: 31704, Stop: 31468, Start Num: 20

Candidate Starts for Wachhund_42:

(Start: 20 @31704 has 44 MA's), (23, 31584), (24, 31572), (25, 31548),

Gene: Zapner_49 Start: 31870, Stop: 31634, Start Num: 20

Candidate Starts for Zapner_49:

(Start: 20 @31870 has 44 MA's), (23, 31750), (24, 31738), (25, 31714),

Gene: Zizzle_42 Start: 31628, Stop: 31392, Start Num: 20

Candidate Starts for Zizzle_42:

(Start: 20 @31628 has 44 MA's), (23, 31508), (24, 31496), (25, 31472),