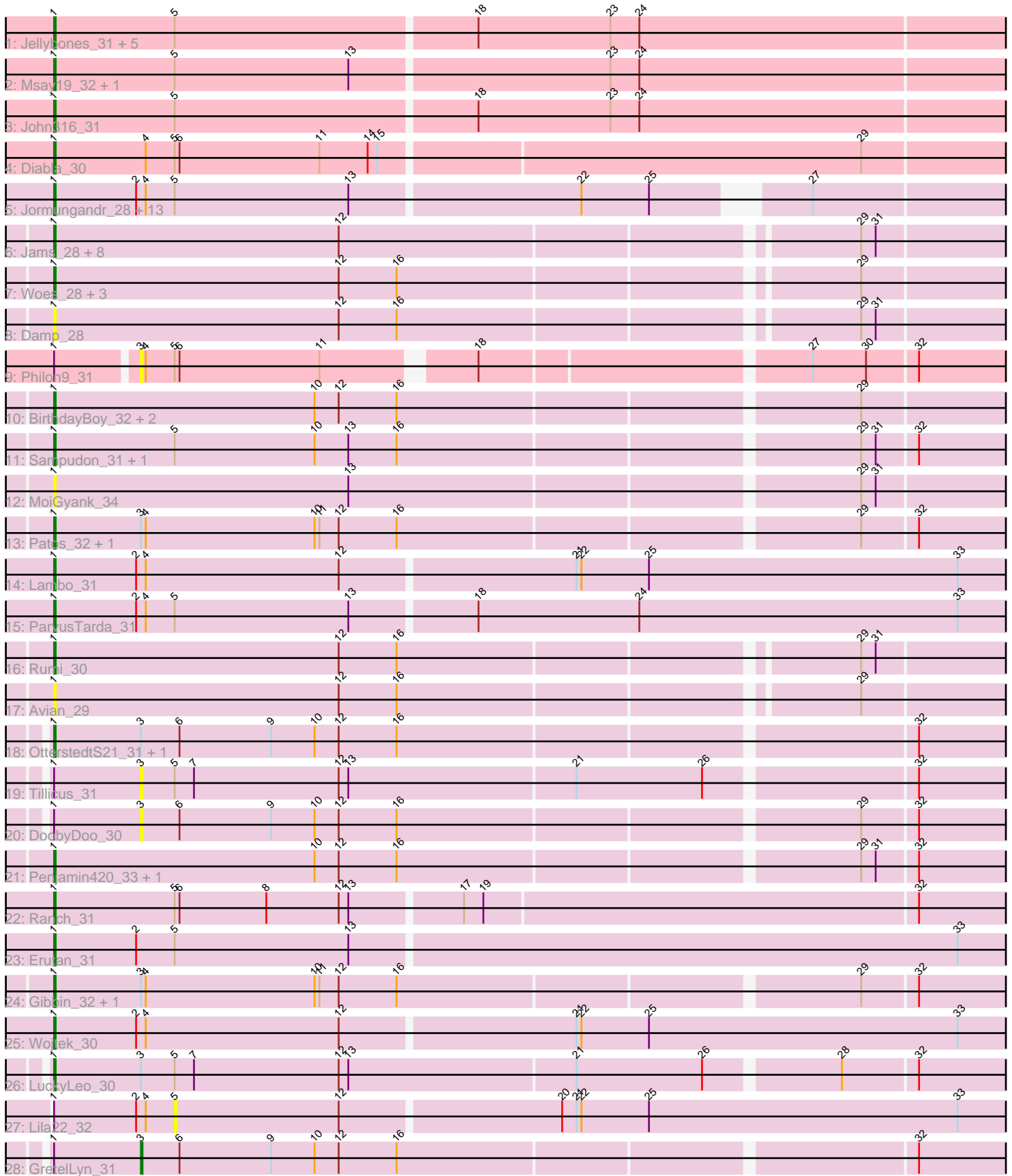


Pham 1821



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 1821 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1821 has 65 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Jellybones_31, Boneham_31, FelixAlejandro_32, Butterball_31, BirksAndSocks_31, Beaver_31
- Track 2 : Msay19_32, Poland_34
- Track 3 : John316_31
- Track 4 : Diabla_30
- Track 5 : Jormungandr_28, Lahirium_28, Harambe_28, Anamika_28, Hail2Pitt_28, Neoevie_28, Nimi13_28, Newt_29, Sticker17_28, Teal_28, Guillaume_28, GalacticEye_28, Hello_28, Luker_29
- Track 6 : Jams_28, Kaseim_29, Charianelly_28, Minos_29, Lidong_28, Bianmat_28, Shelley_28, Berries_29, MrWormie_28
- Track 7 : Woes_28, NovaSharks_30, Alyssamiracle_31, Genamy16_31
- Track 8 : Damp_28
- Track 9 : Philon9_31
- Track 10 : BirthdayBoy_32, Fulcrum_32, GOATification_32
- Track 11 : Sampudon_31, Jalebi_30
- Track 12 : MoiGyank_34
- Track 13 : Patos_32, NorManre_32
- Track 14 : Lambo_31
- Track 15 : ParvusTarda_31
- Track 16 : Rumi_30
- Track 17 : Avian_29
- Track 18 : OtterstedtS21_31, Sadboi_31
- Track 19 : Tillicus_31
- Track 20 : DoobyDoo_30
- Track 21 : Penjamin420_33, Zany_30
- Track 22 : Ranch_31
- Track 23 : Erutan_31
- Track 24 : Gibbin_32, Yikes_32
- Track 25 : Wojtek_30
- Track 26 : LuckyLeo_30
- Track 27 : Lila22_32
- Track 28 : GretelLyn_31

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

The start number called the most often in the published annotations is 1, it was called in 52 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alyssamiracle_31, Anamika_28, Avian_29, Beaver_31, Berries_29, Bianmat_28, BirksAndSocks_31, BirthdayBoy_32, Boneham_31, Butterball_31, Charianelly_28, Damp_28, Diabla_30, Erutan_31, FelixAlejandro_32, Fulcrum_32, GOATification_32, GalacticEye_28, Genamy16_31, Gibbin_32, Guillaume_28, Hail2Pitt_28, Harambe_28, Hello_28, Jalebi_30, Jams_28, Jellybones_31, John316_31, Jormungandr_28, Kaseim_29, Lahirium_28, Lambo_31, Lidong_28, LuckyLeo_30, Luker_29, Minos_29, MoiGyank_34, MrWormie_28, Msay19_32, Neoevie_28, Newt_29, Nimi13_28, NorManre_32, NovaSharks_30, OtterstedtS21_31, ParvusTarda_31, Patos_32, Penjamin420_33, Poland_34, Ranch_31, Rumi_30, Sadboi_31, Sampudon_31, Shelley_28, Sticker17_28, Teal_28, Woes_28, Wojtek_30, Yikes_32, Zany_30,

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

- DoobyDoo_30, GretelLyn_31, Lila22_32, Philon9_31, Tillicus_31,

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

-

Summary by start number:

Start 1:

- Found in 65 of 65 (100.0%) of genes in pham
- Manual Annotations of this start: 52 of 53
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Alyssamiracle_31 (DV), Anamika_28 (CS3), Avian_29 (DV), Beaver_31 (CS2), Berries_29 (CS3), Bianmat_28 (CS3), BirksAndSocks_31 (CS2), BirthdayBoy_32 (DV), Boneham_31 (CS2), Butterball_31 (CS2), Charianelly_28 (CS3), Damp_28 (CS3), Diabla_30 (CS2), Erutan_31 (DV), FelixAlejandro_32 (CS2), Fulcrum_32 (DV), GOATification_32 (DV), GalacticEye_28 (CS3), Genamy16_31 (DV), Gibbin_32 (DV), Guillaume_28 (CS3), Hail2Pitt_28 (CS3), Harambe_28 (CS3), Hello_28 (CS3), Jalebi_30 (DV), Jams_28 (CS3), Jellybones_31 (CS2), John316_31 (CS2), Jormungandr_28 (CS3), Kaseim_29 (CS3), Lahirium_28 (CS3), Lambo_31 (DV), Lidong_28 (CS3), LuckyLeo_30 (DV), Luker_29 (CS3), Minos_29 (CS3), MoiGyank_34 (DV), MrWormie_28 (CS3), Msay19_32 (CS2), Neoevie_28 (CS3), Newt_29 (CS3), Nimi13_28 (CS3), NorManre_32 (DV), NovaSharks_30 (DV), OtterstedtS21_31 (DV), ParvusTarda_31 (DV), Patos_32 (DV), Penjamin420_33 (DV), Poland_34 (CS2), Ranch_31 (DV), Rumi_30 (DV), Sadboi_31 (DV), Sampudon_31 (DV), Shelley_28 (CS3), Sticker17_28 (CS3), Teal_28 (CS3), Woes_28 (CS3), Wojtek_30 (DV), Yikes_32 (DV), Zany_30 (DV),

Start 3:

- Found in 11 of 65 (16.9%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 36.4% of time when present
- Phage (with cluster) where this start called: DoobyDoo_30 (DV), GretelLyn_31 (DV), Philon9_31 (CS4), Tillicus_31 (DV),

Start 5:

- Found in 33 of 65 (50.8%) of genes in pham
- No Manual Annotations of this start.
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Lila22_32 (DV),

Summary by clusters:

There are 4 clusters represented in this pham: DV, CS4, CS3, CS2,

Info for manual annotations of cluster CS2:

- Start number 1 was manually annotated 9 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 1 was manually annotated 21 times for cluster CS3.

Info for manual annotations of cluster DV:

- Start number 1 was manually annotated 22 times for cluster DV.
- Start number 3 was manually annotated 1 time for cluster DV.

Gene Information:

Gene: Alyssamiracle_31 Start: 26760, Stop: 27347, Start Num: 1

Candidate Starts for Alyssamiracle_31:

(Start: 1 @26760 has 52 MA's), (12, 26937), (16, 26973), (29, 27240),

Gene: Anamika_28 Start: 37634, Stop: 38209, Start Num: 1

Candidate Starts for Anamika_28:

(Start: 1 @37634 has 52 MA's), (2, 37685), (4, 37691), (5, 37709), (13, 37817), (22, 37955), (25, 37997), (27, 38072),

Gene: Avian_29 Start: 26742, Stop: 27329, Start Num: 1

Candidate Starts for Avian_29:

(Start: 1 @26742 has 52 MA's), (12, 26919), (16, 26955), (29, 27222),

Gene: Beaver_31 Start: 37090, Stop: 37692, Start Num: 1

Candidate Starts for Beaver_31:

(Start: 1 @37090 has 52 MA's), (5, 37165), (18, 37348), (23, 37429), (24, 37447),

Gene: Berries_29 Start: 37592, Stop: 38179, Start Num: 1

Candidate Starts for Berries_29:

(Start: 1 @37592 has 52 MA's), (12, 37769), (29, 38072), (31, 38081),

Gene: Bianmat_28 Start: 37632, Stop: 38219, Start Num: 1

Candidate Starts for Bianmat_28:

(Start: 1 @37632 has 52 MA's), (12, 37809), (29, 38112), (31, 38121),

Gene: BirksAndSocks_31 Start: 37064, Stop: 37666, Start Num: 1

Candidate Starts for BirksAndSocks_31:

(Start: 1 @37064 has 52 MA's), (5, 37139), (18, 37322), (23, 37403), (24, 37421),

Gene: BirthdayBoy_32 Start: 28776, Stop: 29369, Start Num: 1
Candidate Starts for BirthdayBoy_32:
(Start: 1 @28776 has 52 MA's), (10, 28938), (12, 28953), (16, 28989), (29, 29262),

Gene: Boneham_31 Start: 37063, Stop: 37665, Start Num: 1
Candidate Starts for Boneham_31:
(Start: 1 @37063 has 52 MA's), (5, 37138), (18, 37321), (23, 37402), (24, 37420),

Gene: Butterball_31 Start: 37063, Stop: 37665, Start Num: 1
Candidate Starts for Butterball_31:
(Start: 1 @37063 has 52 MA's), (5, 37138), (18, 37321), (23, 37402), (24, 37420),

Gene: Charianelly_28 Start: 37342, Stop: 37929, Start Num: 1
Candidate Starts for Charianelly_28:
(Start: 1 @37342 has 52 MA's), (12, 37519), (29, 37822), (31, 37831),

Gene: Damp_28 Start: 36506, Stop: 37093, Start Num: 1
Candidate Starts for Damp_28:
(Start: 1 @36506 has 52 MA's), (12, 36683), (16, 36719), (29, 36986), (31, 36995),

Gene: Diabla_30 Start: 36917, Stop: 37516, Start Num: 1
Candidate Starts for Diabla_30:
(Start: 1 @36917 has 52 MA's), (4, 36974), (5, 36992), (6, 36995), (11, 37082), (14, 37112), (15, 37118), (29, 37409),

Gene: DoobyDoo_30 Start: 27779, Stop: 28318, Start Num: 3
Candidate Starts for DoobyDoo_30:
(Start: 1 @27725 has 52 MA's), (Start: 3 @27779 has 1 MA's), (6, 27803), (9, 27860), (10, 27887), (12, 27902), (16, 27938), (29, 28211), (32, 28244),

Gene: Erutan_31 Start: 28223, Stop: 28828, Start Num: 1
Candidate Starts for Erutan_31:
(Start: 1 @28223 has 52 MA's), (2, 28274), (5, 28298), (13, 28406), (33, 28778),

Gene: FelixAlejandro_32 Start: 37261, Stop: 37863, Start Num: 1
Candidate Starts for FelixAlejandro_32:
(Start: 1 @37261 has 52 MA's), (5, 37336), (18, 37519), (23, 37600), (24, 37618),

Gene: Fulcrum_32 Start: 28753, Stop: 29346, Start Num: 1
Candidate Starts for Fulcrum_32:
(Start: 1 @28753 has 52 MA's), (10, 28915), (12, 28930), (16, 28966), (29, 29239),

Gene: GOATification_32 Start: 28753, Stop: 29346, Start Num: 1
Candidate Starts for GOATification_32:
(Start: 1 @28753 has 52 MA's), (10, 28915), (12, 28930), (16, 28966), (29, 29239),

Gene: GalacticEye_28 Start: 37316, Stop: 37891, Start Num: 1
Candidate Starts for GalacticEye_28:
(Start: 1 @37316 has 52 MA's), (2, 37367), (4, 37373), (5, 37391), (13, 37499), (22, 37637), (25, 37679), (27, 37754),

Gene: Genamy16_31 Start: 26760, Stop: 27347, Start Num: 1
Candidate Starts for Genamy16_31:

(Start: 1 @26760 has 52 MA's), (12, 26937), (16, 26973), (29, 27240),

Gene: Gibbin_32 Start: 28852, Stop: 29445, Start Num: 1

Candidate Starts for Gibbin_32:

(Start: 1 @28852 has 52 MA's), (Start: 3 @28906 has 1 MA's), (4, 28909), (10, 29014), (11, 29017), (12, 29029), (16, 29065), (29, 29338), (32, 29371),

Gene: Gretellyn_31 Start: 29165, Stop: 29704, Start Num: 3

Candidate Starts for Gretellyn_31:

(Start: 1 @29111 has 52 MA's), (Start: 3 @29165 has 1 MA's), (6, 29189), (9, 29246), (10, 29273), (12, 29288), (16, 29324), (32, 29630),

Gene: Guillaume_28 Start: 37366, Stop: 37941, Start Num: 1

Candidate Starts for Guillaume_28:

(Start: 1 @37366 has 52 MA's), (2, 37417), (4, 37423), (5, 37441), (13, 37549), (22, 37687), (25, 37729), (27, 37804),

Gene: Hail2Pitt_28 Start: 37843, Stop: 38418, Start Num: 1

Candidate Starts for Hail2Pitt_28:

(Start: 1 @37843 has 52 MA's), (2, 37894), (4, 37900), (5, 37918), (13, 38026), (22, 38164), (25, 38206), (27, 38281),

Gene: Harambe_28 Start: 37633, Stop: 38208, Start Num: 1

Candidate Starts for Harambe_28:

(Start: 1 @37633 has 52 MA's), (2, 37684), (4, 37690), (5, 37708), (13, 37816), (22, 37954), (25, 37996), (27, 38071),

Gene: Hello_28 Start: 37595, Stop: 38170, Start Num: 1

Candidate Starts for Hello_28:

(Start: 1 @37595 has 52 MA's), (2, 37646), (4, 37652), (5, 37670), (13, 37778), (22, 37916), (25, 37958), (27, 38033),

Gene: Jalebi_30 Start: 29287, Stop: 29880, Start Num: 1

Candidate Starts for Jalebi_30:

(Start: 1 @29287 has 52 MA's), (5, 29362), (10, 29449), (13, 29470), (16, 29500), (29, 29773), (31, 29782), (32, 29806),

Gene: Jams_28 Start: 36792, Stop: 37379, Start Num: 1

Candidate Starts for Jams_28:

(Start: 1 @36792 has 52 MA's), (12, 36969), (29, 37272), (31, 37281),

Gene: Jellybones_31 Start: 37122, Stop: 37724, Start Num: 1

Candidate Starts for Jellybones_31:

(Start: 1 @37122 has 52 MA's), (5, 37197), (18, 37380), (23, 37461), (24, 37479),

Gene: John316_31 Start: 37075, Stop: 37677, Start Num: 1

Candidate Starts for John316_31:

(Start: 1 @37075 has 52 MA's), (5, 37150), (18, 37333), (23, 37414), (24, 37432),

Gene: Jormungandr_28 Start: 37348, Stop: 37923, Start Num: 1

Candidate Starts for Jormungandr_28:

(Start: 1 @37348 has 52 MA's), (2, 37399), (4, 37405), (5, 37423), (13, 37531), (22, 37669), (25, 37711), (27, 37786),

Gene: Kaseim_29 Start: 36777, Stop: 37364, Start Num: 1

Candidate Starts for Kaseim_29:

(Start: 1 @36777 has 52 MA's), (12, 36954), (29, 37257), (31, 37266),

Gene: Lahirium_28 Start: 37870, Stop: 38445, Start Num: 1

Candidate Starts for Lahirium_28:

(Start: 1 @37870 has 52 MA's), (2, 37921), (4, 37927), (5, 37945), (13, 38053), (22, 38191), (25, 38233), (27, 38308),

Gene: Lambo_31 Start: 28762, Stop: 29367, Start Num: 1

Candidate Starts for Lambo_31:

(Start: 1 @28762 has 52 MA's), (2, 28813), (4, 28819), (12, 28939), (21, 29080), (22, 29083), (25, 29125), (33, 29317),

Gene: Lidong_28 Start: 37592, Stop: 38179, Start Num: 1

Candidate Starts for Lidong_28:

(Start: 1 @37592 has 52 MA's), (12, 37769), (29, 38072), (31, 38081),

Gene: Lila22_32 Start: 28792, Stop: 29322, Start Num: 5

Candidate Starts for Lila22_32:

(Start: 1 @28717 has 52 MA's), (2, 28768), (4, 28774), (5, 28792), (12, 28894), (20, 29026), (21, 29035), (22, 29038), (25, 29080), (33, 29272),

Gene: LuckyLeo_30 Start: 28090, Stop: 28686, Start Num: 1

Candidate Starts for LuckyLeo_30:

(Start: 1 @28090 has 52 MA's), (Start: 3 @28144 has 1 MA's), (5, 28165), (7, 28177), (12, 28267), (13, 28273), (21, 28411), (26, 28489), (28, 28567), (32, 28612),

Gene: Luker_29 Start: 37823, Stop: 38398, Start Num: 1

Candidate Starts for Luker_29:

(Start: 1 @37823 has 52 MA's), (2, 37874), (4, 37880), (5, 37898), (13, 38006), (22, 38144), (25, 38186), (27, 38261),

Gene: Minos_29 Start: 37334, Stop: 37921, Start Num: 1

Candidate Starts for Minos_29:

(Start: 1 @37334 has 52 MA's), (12, 37511), (29, 37814), (31, 37823),

Gene: MoiGyank_34 Start: 29157, Stop: 29750, Start Num: 1

Candidate Starts for MoiGyank_34:

(Start: 1 @29157 has 52 MA's), (13, 29340), (29, 29643), (31, 29652),

Gene: MrWormie_28 Start: 36495, Stop: 37082, Start Num: 1

Candidate Starts for MrWormie_28:

(Start: 1 @36495 has 52 MA's), (12, 36672), (29, 36975), (31, 36984),

Gene: Msay19_32 Start: 37256, Stop: 37858, Start Num: 1

Candidate Starts for Msay19_32:

(Start: 1 @37256 has 52 MA's), (5, 37331), (13, 37439), (23, 37595), (24, 37613),

Gene: Neoevie_28 Start: 37610, Stop: 38185, Start Num: 1

Candidate Starts for Neoevie_28:

(Start: 1 @37610 has 52 MA's), (2, 37661), (4, 37667), (5, 37685), (13, 37793), (22, 37931), (25, 37973), (27, 38048),

Gene: Newt_29 Start: 37837, Stop: 38412, Start Num: 1

Candidate Starts for Newt_29:

(Start: 1 @37837 has 52 MA's), (2, 37888), (4, 37894), (5, 37912), (13, 38020), (22, 38158), (25, 38200), (27, 38275),

Gene: Nimi13_28 Start: 37355, Stop: 37930, Start Num: 1

Candidate Starts for Nimi13_28:

(Start: 1 @37355 has 52 MA's), (2, 37406), (4, 37412), (5, 37430), (13, 37538), (22, 37676), (25, 37718), (27, 37793),

Gene: NorManre_32 Start: 28358, Stop: 28951, Start Num: 1

Candidate Starts for NorManre_32:

(Start: 1 @28358 has 52 MA's), (Start: 3 @28412 has 1 MA's), (4, 28415), (10, 28520), (11, 28523), (12, 28535), (16, 28571), (29, 28844), (32, 28877),

Gene: NovaSharks_30 Start: 26350, Stop: 26937, Start Num: 1

Candidate Starts for NovaSharks_30:

(Start: 1 @26350 has 52 MA's), (12, 26527), (16, 26563), (29, 26830),

Gene: OtterstedtS21_31 Start: 28433, Stop: 29026, Start Num: 1

Candidate Starts for OtterstedtS21_31:

(Start: 1 @28433 has 52 MA's), (Start: 3 @28487 has 1 MA's), (6, 28511), (9, 28568), (10, 28595), (12, 28610), (16, 28646), (32, 28952),

Gene: ParvusTarda_31 Start: 27891, Stop: 28496, Start Num: 1

Candidate Starts for ParvusTarda_31:

(Start: 1 @27891 has 52 MA's), (2, 27942), (4, 27948), (5, 27966), (13, 28074), (18, 28149), (24, 28248), (33, 28446),

Gene: Patos_32 Start: 28358, Stop: 28951, Start Num: 1

Candidate Starts for Patos_32:

(Start: 1 @28358 has 52 MA's), (Start: 3 @28412 has 1 MA's), (4, 28415), (10, 28520), (11, 28523), (12, 28535), (16, 28571), (29, 28844), (32, 28877),

Gene: Penjamin420_33 Start: 28575, Stop: 29168, Start Num: 1

Candidate Starts for Penjamin420_33:

(Start: 1 @28575 has 52 MA's), (10, 28737), (12, 28752), (16, 28788), (29, 29061), (31, 29070), (32, 29094),

Gene: Philon9_31 Start: 39468, Stop: 39992, Start Num: 3

Candidate Starts for Philon9_31:

(Start: 1 @39420 has 52 MA's), (Start: 3 @39468 has 1 MA's), (4, 39471), (5, 39489), (6, 39492), (11, 39579), (18, 39663), (27, 39855), (30, 39888), (32, 39918),

Gene: Poland_34 Start: 37235, Stop: 37837, Start Num: 1

Candidate Starts for Poland_34:

(Start: 1 @37235 has 52 MA's), (5, 37310), (13, 37418), (23, 37574), (24, 37592),

Gene: Ranch_31 Start: 27251, Stop: 27850, Start Num: 1

Candidate Starts for Ranch_31:

(Start: 1 @27251 has 52 MA's), (5, 27326), (6, 27329), (8, 27383), (12, 27428), (13, 27434), (17, 27500), (19, 27512), (32, 27776),

Gene: Rumi_30 Start: 26353, Stop: 26940, Start Num: 1

Candidate Starts for Rumi_30:

(Start: 1 @26353 has 52 MA's), (12, 26530), (16, 26566), (29, 26833), (31, 26842),

Gene: Sadboi_31 Start: 29111, Stop: 29704, Start Num: 1

Candidate Starts for Sadboi_31:

(Start: 1 @29111 has 52 MA's), (Start: 3 @29165 has 1 MA's), (6, 29189), (9, 29246), (10, 29273), (12, 29288), (16, 29324), (32, 29630),

Gene: Sampudon_31 Start: 29287, Stop: 29880, Start Num: 1

Candidate Starts for Sampudon_31:

(Start: 1 @29287 has 52 MA's), (5, 29362), (10, 29449), (13, 29470), (16, 29500), (29, 29773), (31, 29782), (32, 29806),

Gene: Shelley_28 Start: 36819, Stop: 37406, Start Num: 1

Candidate Starts for Shelley_28:

(Start: 1 @36819 has 52 MA's), (12, 36996), (29, 37299), (31, 37308),

Gene: Sticker17_28 Start: 37346, Stop: 37921, Start Num: 1

Candidate Starts for Sticker17_28:

(Start: 1 @37346 has 52 MA's), (2, 37397), (4, 37403), (5, 37421), (13, 37529), (22, 37667), (25, 37709), (27, 37784),

Gene: Teal_28 Start: 37814, Stop: 38389, Start Num: 1

Candidate Starts for Teal_28:

(Start: 1 @37814 has 52 MA's), (2, 37865), (4, 37871), (5, 37889), (13, 37997), (22, 38135), (25, 38177), (27, 38252),

Gene: Tillicus_31 Start: 27738, Stop: 28280, Start Num: 3

Candidate Starts for Tillicus_31:

(Start: 1 @27684 has 52 MA's), (Start: 3 @27738 has 1 MA's), (5, 27759), (7, 27771), (12, 27861), (13, 27867), (21, 28005), (26, 28083), (32, 28206),

Gene: Woes_28 Start: 37853, Stop: 38440, Start Num: 1

Candidate Starts for Woes_28:

(Start: 1 @37853 has 52 MA's), (12, 38030), (16, 38066), (29, 38333),

Gene: Wojtek_30 Start: 27970, Stop: 28575, Start Num: 1

Candidate Starts for Wojtek_30:

(Start: 1 @27970 has 52 MA's), (2, 28021), (4, 28027), (12, 28147), (21, 28288), (22, 28291), (25, 28333), (33, 28525),

Gene: Yikes_32 Start: 29366, Stop: 29959, Start Num: 1

Candidate Starts for Yikes_32:

(Start: 1 @29366 has 52 MA's), (Start: 3 @29420 has 1 MA's), (4, 29423), (10, 29528), (11, 29531), (12, 29543), (16, 29579), (29, 29852), (32, 29885),

Gene: Zany_30 Start: 28893, Stop: 29486, Start Num: 1

Candidate Starts for Zany_30:

(Start: 1 @28893 has 52 MA's), (10, 29055), (12, 29070), (16, 29106), (29, 29379), (31, 29388), (32, 29412),