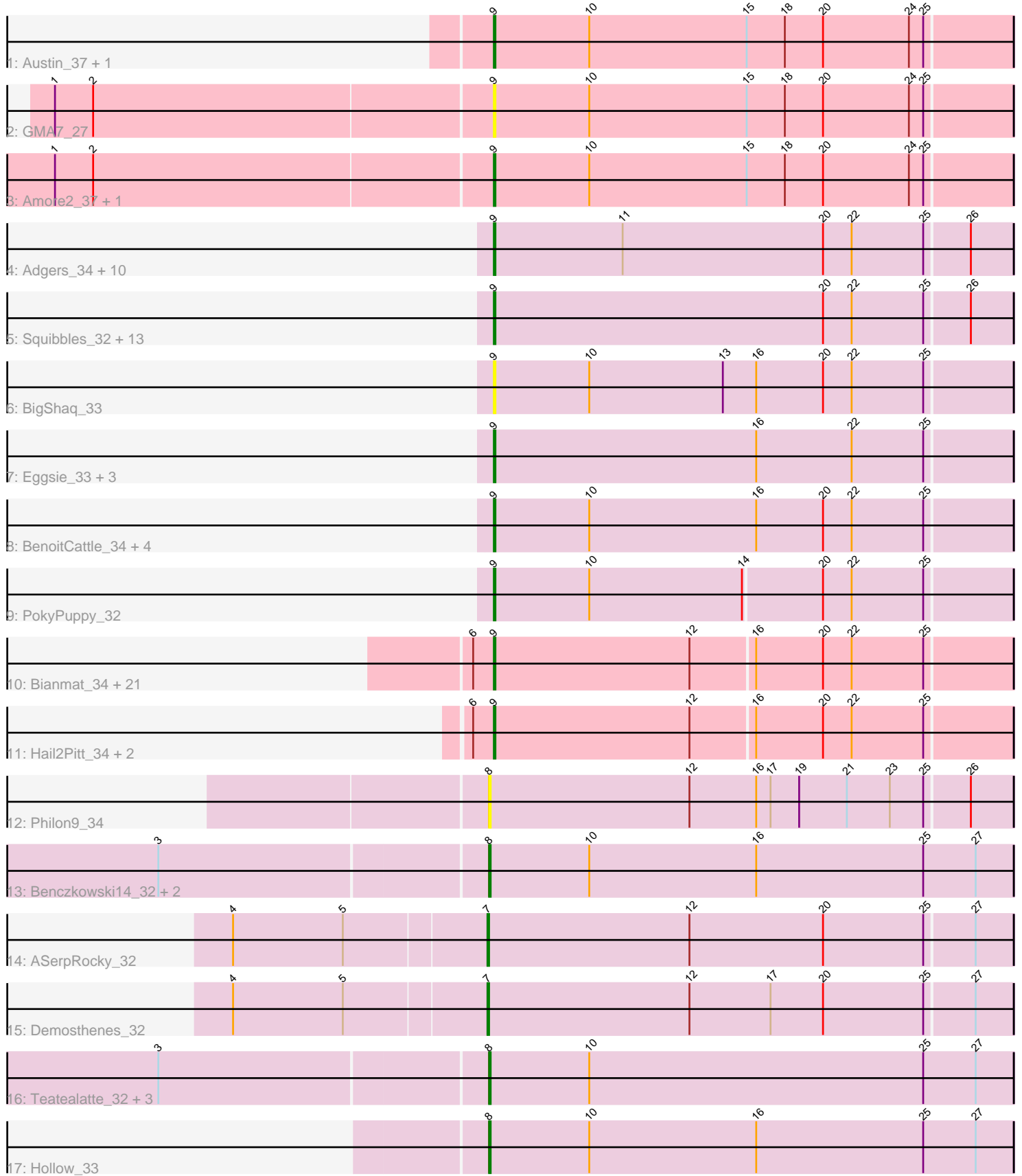


Pham 1429



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 1429 Report

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

Pham number 1429 has 77 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Austin_37, HayZem_36
- Track 2 : GMA7_27
- Track 3 : Amore2_37, GTE7_27
- Track 4 : Adgers_34, Jellybones_37, Boneham_37, Breezic_33, Barbochs_33, Sombrero_33, Butterball_37, FelixAlejandro_38, Poland_40, BirksAndSocks_37, Msay19_38
- Track 5 : Squibbles_32, CathyBurgh_32, Exiguo_33, Flakey_33, GourdThymes_33, Sam12_33, John316_37, Gorko_33, RemRem_34, Ekhein_33, Beaver_37, Lizzo_33, Hotorobo_33, Monty_32
- Track 6 : BigShaq_33
- Track 7 : Eggsie_33, SteveFrench_33, Diabla_36, RoyalG_34
- Track 8 : BenoitCattle_34, Dakiti_33, Chelms_33, PierreThree_33, Linetti_34
- Track 9 : PokyPuppy_32
- Track 10 : Bianmat_34, Kaseim_35, Damp_34, Teal_34, Berries_35, Sticker17_34, Guillaume_34, Woes_34, Harambe_34, Shelley_34, Jormungandr_34, Jams_34, Charianelly_34, Lahirium_34, MrWormie_34, Newt_35, GalacticEye_34, Luker_35, Nimi13_34, Lidong_34, Minos_35, Hello_34
- Track 11 : Hail2Pitt_34, Neoevie_34, Anamika_34
- Track 12 : Philon9_34
- Track 13 : Benczkowski14_32, Kvothe_32, Katyusha_32
- Track 14 : ASerpRocky_32
- Track 15 : Demosthenes_32
- Track 16 : Teatealatte_32, Niagara_32, Teech_32, Tredge_32
- Track 17 : Hollow_33

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

The start number called the most often in the published annotations is 9, it was called in 52 of the 61 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers_34, Amore2_37, Anamika_34, Austin_37, Barbochs_33, Beaver_37, BenoitCattle_34, Berries_35, Bianmat_34, BigShaq_33, BirksAndSocks_37, Boneham_37, Breezic_33, Butterball_37, CathyBurgh_32, Charianelly_34,

Chelms_33, Dakiti_33, Damp_34, Diabla_36, Eggsie_33, Ekhein_33, Exiguo_33, FelixAlejandro_38, Flakey_33, GMA7_27, GTE7_27, GalacticEye_34, Gorko_33, GourdThymes_33, Guillaume_34, Hail2Pitt_34, Harambe_34, HayZem_36, Hello_34, Hotorobo_33, Jams_34, Jellybones_37, John316_37, Jormungandr_34, Kaseim_35, Lahirium_34, Lidong_34, Linetti_34, Lizzo_33, Luker_35, Minos_35, Monty_32, MrWormie_34, Msay19_38, Neoevie_34, Newt_35, Nimi13_34, PierreThree_33, PokyPuppy_32, Poland_40, RemRem_34, RoyalG_34, Sam12_33, Shelley_34, Sombrero_33, Squibbles_32, SteveFrench_33, Sticker17_34, Teal_34, Woes_34,

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

-

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

- ASerpRocky_32, Benczkowski14_32, Demosthenes_32, Hollow_33, Katyusha_32, Kvothe_32, Niagara_32, Philon9_34, Teatealatte_32, Teech_32, Tredge_32,

Summary by start number:

Start 7:

- Found in 2 of 77 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_32 (CS4), Demosthenes_32 (CS4),

Start 8:

- Found in 9 of 77 (11.7%) of genes in pham
- Manual Annotations of this start: 7 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benczkowski14_32 (CS4), Hollow_33 (CS4), Katyusha_32 (CS4), Kvothe_32 (CS4), Niagara_32 (CS4), Philon9_34 (CS4), Teatealatte_32 (CS4), Teech_32 (CS4), Tredge_32 (CS4),

Start 9:

- Found in 66 of 77 (85.7%) of genes in pham
- Manual Annotations of this start: 52 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adgers_34 (CS2), Amore2_37 (CS1), Anamika_34 (CS3), Austin_37 (CS1), Barbochs_33 (CS2), Beaver_37 (CS2), BenoitCattle_34 (CS2), Berries_35 (CS3), Bianmat_34 (CS3), BigShaq_33 (CS2), BirksAndSocks_37 (CS2), Boneham_37 (CS2), Breezic_33 (CS2), Butterball_37 (CS2), CathyBurgh_32 (CS2), Charianelly_34 (CS3), Chelms_33 (CS2), Dakiti_33 (CS2), Damp_34 (CS3), Diabla_36 (CS2), Eggsie_33 (CS2), Ekhein_33 (CS2), Exiguo_33 (CS2), FelixAlejandro_38 (CS2), Flakey_33 (CS2), GMA7_27 (CS1), GTE7_27 (CS1), GalacticEye_34 (CS3), Gorko_33 (CS2), GourdThymes_33 (CS2), Guillaume_34 (CS3), Hail2Pitt_34 (CS3), Harambe_34 (CS3), HayZem_36 (CS1), Hello_34 (CS3), Hotorobo_33 (CS2), Jams_34 (CS3), Jellybones_37 (CS2), John316_37 (CS2), Jormungandr_34 (CS3), Kaseim_35 (CS3), Lahirium_34 (CS3), Lidong_34 (CS3), Linetti_34 (CS2), Lizzo_33 (CS2), Luker_35 (CS3), Minos_35 (CS3), Monty_32 (CS2), MrWormie_34 (CS3), Msay19_38 (CS2), Neoevie_34 (CS3), Newt_35 (CS3), Nimi13_34 (CS3), PierreThree_33 (CS2), PokyPuppy_32 (CS2), Poland_40 (CS2), RemRem_34 (CS2), RoyalG_34 (CS2), Sam12_33 (CS2), Shelley_34 (CS3), Sombrero_33 (CS2), Squibbles_32 (CS2), SteveFrench_33 (CS2),

Sticker17_34 (CS3), Teal_34 (CS3), Woes_34 (CS3),

Summary by clusters:

There are 4 clusters represented in this pham: CS4, CS1, CS3, CS2,

Info for manual annotations of cluster CS1:

- Start number 9 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 9 was manually annotated 29 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 9 was manually annotated 21 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 7 was manually annotated 2 times for cluster CS4.
- Start number 8 was manually annotated 7 times for cluster CS4.

Gene Information:

Gene: ASerpRocky_32 Start: 39562, Stop: 39888, Start Num: 7

Candidate Starts for ASerpRocky_32:

(4, 39406), (5, 39475), (Start: 7 @39562 has 2 MA's), (12, 39688), (20, 39772), (25, 39835), (27, 39865),

Gene: Adgers_34 Start: 38107, Stop: 38430, Start Num: 9

Candidate Starts for Adgers_34:

(Start: 9 @38107 has 52 MA's), (11, 38188), (20, 38314), (22, 38332), (25, 38377), (26, 38404),

Gene: Amore2_37 Start: 38634, Stop: 38957, Start Num: 9

Candidate Starts for Amore2_37:

(1, 38364), (2, 38388), (Start: 9 @38634 has 52 MA's), (10, 38694), (15, 38793), (18, 38817), (20, 38841), (24, 38895), (25, 38904),

Gene: Anamika_34 Start: 40483, Stop: 40803, Start Num: 9

Candidate Starts for Anamika_34:

(6, 40471), (Start: 9 @40483 has 52 MA's), (12, 40606), (16, 40645), (20, 40687), (22, 40705), (25, 40750),

Gene: Austin_37 Start: 38634, Stop: 38957, Start Num: 9

Candidate Starts for Austin_37:

(Start: 9 @38634 has 52 MA's), (10, 38694), (15, 38793), (18, 38817), (20, 38841), (24, 38895), (25, 38904),

Gene: Barbochs_33 Start: 37946, Stop: 38269, Start Num: 9

Candidate Starts for Barbochs_33:

(Start: 9 @37946 has 52 MA's), (11, 38027), (20, 38153), (22, 38171), (25, 38216), (26, 38243),

Gene: Beaver_37 Start: 39993, Stop: 40316, Start Num: 9

Candidate Starts for Beaver_37:

(Start: 9 @39993 has 52 MA's), (20, 40200), (22, 40218), (25, 40263), (26, 40290),

Gene: Benczkowski14_32 Start: 39598, Stop: 39927, Start Num: 8

Candidate Starts for Benczkowski14_32:

(3, 39397), (Start: 8 @39598 has 7 MA's), (10, 39661), (16, 39766), (25, 39871), (27, 39904),

Gene: BenoitCattle_34 Start: 38051, Stop: 38374, Start Num: 9

Candidate Starts for BenoitCattle_34:

(Start: 9 @38051 has 52 MA's), (10, 38111), (16, 38216), (20, 38258), (22, 38276), (25, 38321),

Gene: Berries_35 Start: 40454, Stop: 40774, Start Num: 9

Candidate Starts for Berries_35:

(6, 40442), (Start: 9 @40454 has 52 MA's), (12, 40577), (16, 40616), (20, 40658), (22, 40676), (25, 40721),

Gene: Bianmat_34 Start: 40494, Stop: 40814, Start Num: 9

Candidate Starts for Bianmat_34:

(6, 40482), (Start: 9 @40494 has 52 MA's), (12, 40617), (16, 40656), (20, 40698), (22, 40716), (25, 40761),

Gene: BigShaq_33 Start: 38056, Stop: 38379, Start Num: 9

Candidate Starts for BigShaq_33:

(Start: 9 @38056 has 52 MA's), (10, 38116), (13, 38200), (16, 38221), (20, 38263), (22, 38281), (25, 38326),

Gene: BirksAndSocks_37 Start: 39971, Stop: 40294, Start Num: 9

Candidate Starts for BirksAndSocks_37:

(Start: 9 @39971 has 52 MA's), (11, 40052), (20, 40178), (22, 40196), (25, 40241), (26, 40268),

Gene: Boneham_37 Start: 39970, Stop: 40293, Start Num: 9

Candidate Starts for Boneham_37:

(Start: 9 @39970 has 52 MA's), (11, 40051), (20, 40177), (22, 40195), (25, 40240), (26, 40267),

Gene: Breezic_33 Start: 37959, Stop: 38282, Start Num: 9

Candidate Starts for Breezic_33:

(Start: 9 @37959 has 52 MA's), (11, 38040), (20, 38166), (22, 38184), (25, 38229), (26, 38256),

Gene: Butterball_37 Start: 39970, Stop: 40293, Start Num: 9

Candidate Starts for Butterball_37:

(Start: 9 @39970 has 52 MA's), (11, 40051), (20, 40177), (22, 40195), (25, 40240), (26, 40267),

Gene: CathyBurgh_32 Start: 38813, Stop: 39136, Start Num: 9

Candidate Starts for CathyBurgh_32:

(Start: 9 @38813 has 52 MA's), (20, 39020), (22, 39038), (25, 39083), (26, 39110),

Gene: Charianelly_34 Start: 40204, Stop: 40524, Start Num: 9

Candidate Starts for Charianelly_34:

(6, 40192), (Start: 9 @40204 has 52 MA's), (12, 40327), (16, 40366), (20, 40408), (22, 40426), (25, 40471),

Gene: Chelms_33 Start: 38059, Stop: 38382, Start Num: 9

Candidate Starts for Chelms_33:

(Start: 9 @38059 has 52 MA's), (10, 38119), (16, 38224), (20, 38266), (22, 38284), (25, 38329),

Gene: Dakiti_33 Start: 38927, Stop: 39250, Start Num: 9

Candidate Starts for Dakiti_33:

(Start: 9 @38927 has 52 MA's), (10, 38987), (16, 39092), (20, 39134), (22, 39152), (25, 39197),

Gene: Damp_34 Start: 39368, Stop: 39688, Start Num: 9

Candidate Starts for Damp_34:

(6, 39356), (Start: 9 @39368 has 52 MA's), (12, 39491), (16, 39530), (20, 39572), (22, 39590), (25, 39635),

Gene: Demosthenes_32 Start: 39535, Stop: 39861, Start Num: 7

Candidate Starts for Demosthenes_32:

(4, 39379), (5, 39448), (Start: 7 @39535 has 2 MA's), (12, 39661), (17, 39712), (20, 39745), (25, 39808), (27, 39838),

Gene: Diabla_36 Start: 39814, Stop: 40137, Start Num: 9

Candidate Starts for Diabla_36:

(Start: 9 @39814 has 52 MA's), (16, 39979), (22, 40039), (25, 40084),

Gene: Eggsie_33 Start: 38083, Stop: 38406, Start Num: 9

Candidate Starts for Eggsie_33:

(Start: 9 @38083 has 52 MA's), (16, 38248), (22, 38308), (25, 38353),

Gene: Ekhein_33 Start: 37941, Stop: 38264, Start Num: 9

Candidate Starts for Ekhein_33:

(Start: 9 @37941 has 52 MA's), (20, 38148), (22, 38166), (25, 38211), (26, 38238),

Gene: Exiguo_33 Start: 37953, Stop: 38276, Start Num: 9

Candidate Starts for Exiguo_33:

(Start: 9 @37953 has 52 MA's), (20, 38160), (22, 38178), (25, 38223), (26, 38250),

Gene: FelixAlejandro_38 Start: 40168, Stop: 40491, Start Num: 9

Candidate Starts for FelixAlejandro_38:

(Start: 9 @40168 has 52 MA's), (11, 40249), (20, 40375), (22, 40393), (25, 40438), (26, 40465),

Gene: Flakey_33 Start: 38817, Stop: 39140, Start Num: 9

Candidate Starts for Flakey_33:

(Start: 9 @38817 has 52 MA's), (20, 39024), (22, 39042), (25, 39087), (26, 39114),

Gene: GMA7_27 Start: 32848, Stop: 33171, Start Num: 9

Candidate Starts for GMA7_27:

(1, 32578), (2, 32602), (Start: 9 @32848 has 52 MA's), (10, 32908), (15, 33007), (18, 33031), (20, 33055), (24, 33109), (25, 33118),

Gene: GTE7_27 Start: 32879, Stop: 33202, Start Num: 9

Candidate Starts for GTE7_27:

(1, 32609), (2, 32633), (Start: 9 @32879 has 52 MA's), (10, 32939), (15, 33038), (18, 33062), (20, 33086), (24, 33140), (25, 33149),

Gene: GalacticEye_34 Start: 40166, Stop: 40486, Start Num: 9

Candidate Starts for GalacticEye_34:

(6, 40154), (Start: 9 @40166 has 52 MA's), (12, 40289), (16, 40328), (20, 40370), (22, 40388), (25, 40433),

Gene: Gorko_33 Start: 37945, Stop: 38268, Start Num: 9

Candidate Starts for Gorko_33:

(Start: 9 @37945 has 52 MA's), (20, 38152), (22, 38170), (25, 38215), (26, 38242),

Gene: GourdThymes_33 Start: 38819, Stop: 39142, Start Num: 9

Candidate Starts for GourdThymes_33:

(Start: 9 @38819 has 52 MA's), (20, 39026), (22, 39044), (25, 39089), (26, 39116),

Gene: Guillaume_34 Start: 40216, Stop: 40536, Start Num: 9

Candidate Starts for Guillaume_34:

(6, 40204), (Start: 9 @40216 has 52 MA's), (12, 40339), (16, 40378), (20, 40420), (22, 40438), (25, 40483),

Gene: Hail2Pitt_34 Start: 40692, Stop: 41012, Start Num: 9

Candidate Starts for Hail2Pitt_34:

(6, 40680), (Start: 9 @40692 has 52 MA's), (12, 40815), (16, 40854), (20, 40896), (22, 40914), (25, 40959),

Gene: Harambe_34 Start: 40483, Stop: 40803, Start Num: 9

Candidate Starts for Harambe_34:

(6, 40471), (Start: 9 @40483 has 52 MA's), (12, 40606), (16, 40645), (20, 40687), (22, 40705), (25, 40750),

Gene: HayZem_36 Start: 38631, Stop: 38954, Start Num: 9

Candidate Starts for HayZem_36:

(Start: 9 @38631 has 52 MA's), (10, 38691), (15, 38790), (18, 38814), (20, 38838), (24, 38892), (25, 38901),

Gene: Hello_34 Start: 40445, Stop: 40765, Start Num: 9

Candidate Starts for Hello_34:

(6, 40433), (Start: 9 @40445 has 52 MA's), (12, 40568), (16, 40607), (20, 40649), (22, 40667), (25, 40712),

Gene: Hollow_33 Start: 39944, Stop: 40273, Start Num: 8

Candidate Starts for Hollow_33:

(Start: 8 @39944 has 7 MA's), (10, 40007), (16, 40112), (25, 40217), (27, 40250),

Gene: Hotorobo_33 Start: 38824, Stop: 39147, Start Num: 9

Candidate Starts for Hotorobo_33:

(Start: 9 @38824 has 52 MA's), (20, 39031), (22, 39049), (25, 39094), (26, 39121),

Gene: Jams_34 Start: 39654, Stop: 39974, Start Num: 9

Candidate Starts for Jams_34:

(6, 39642), (Start: 9 @39654 has 52 MA's), (12, 39777), (16, 39816), (20, 39858), (22, 39876), (25, 39921),

Gene: Jellybones_37 Start: 40029, Stop: 40352, Start Num: 9

Candidate Starts for Jellybones_37:

(Start: 9 @40029 has 52 MA's), (11, 40110), (20, 40236), (22, 40254), (25, 40299), (26, 40326),

Gene: John316_37 Start: 39982, Stop: 40305, Start Num: 9

Candidate Starts for John316_37:

(Start: 9 @39982 has 52 MA's), (20, 40189), (22, 40207), (25, 40252), (26, 40279),

Gene: Jormungandr_34 Start: 40198, Stop: 40518, Start Num: 9

Candidate Starts for Jormungandr_34:

(6, 40186), (Start: 9 @40198 has 52 MA's), (12, 40321), (16, 40360), (20, 40402), (22, 40420), (25, 40465),

Gene: Kaseim_35 Start: 39639, Stop: 39959, Start Num: 9

Candidate Starts for Kaseim_35:

(6, 39627), (Start: 9 @39639 has 52 MA's), (12, 39762), (16, 39801), (20, 39843), (22, 39861), (25, 39906),

Gene: Katyusha_32 Start: 39598, Stop: 39927, Start Num: 8

Candidate Starts for Katyusha_32:

(3, 39397), (Start: 8 @39598 has 7 MA's), (10, 39661), (16, 39766), (25, 39871), (27, 39904),

Gene: Kvothe_32 Start: 39497, Stop: 39826, Start Num: 8

Candidate Starts for Kvothe_32:

(3, 39296), (Start: 8 @39497 has 7 MA's), (10, 39560), (16, 39665), (25, 39770), (27, 39803),

Gene: Lahirium_34 Start: 40720, Stop: 41040, Start Num: 9

Candidate Starts for Lahirium_34:

(6, 40708), (Start: 9 @40720 has 52 MA's), (12, 40843), (16, 40882), (20, 40924), (22, 40942), (25, 40987),

Gene: Lidong_34 Start: 40454, Stop: 40774, Start Num: 9

Candidate Starts for Lidong_34:

(6, 40442), (Start: 9 @40454 has 52 MA's), (12, 40577), (16, 40616), (20, 40658), (22, 40676), (25, 40721),

Gene: Linetti_34 Start: 39053, Stop: 39376, Start Num: 9

Candidate Starts for Linetti_34:

(Start: 9 @39053 has 52 MA's), (10, 39113), (16, 39218), (20, 39260), (22, 39278), (25, 39323),

Gene: Lizzo_33 Start: 38813, Stop: 39136, Start Num: 9

Candidate Starts for Lizzo_33:

(Start: 9 @38813 has 52 MA's), (20, 39020), (22, 39038), (25, 39083), (26, 39110),

Gene: Luker_35 Start: 40673, Stop: 40993, Start Num: 9

Candidate Starts for Luker_35:

(6, 40661), (Start: 9 @40673 has 52 MA's), (12, 40796), (16, 40835), (20, 40877), (22, 40895), (25, 40940),

Gene: Minos_35 Start: 40196, Stop: 40516, Start Num: 9

Candidate Starts for Minos_35:

(6, 40184), (Start: 9 @40196 has 52 MA's), (12, 40319), (16, 40358), (20, 40400), (22, 40418), (25, 40463),

Gene: Monty_32 Start: 37963, Stop: 38286, Start Num: 9

Candidate Starts for Monty_32:

(Start: 9 @37963 has 52 MA's), (20, 38170), (22, 38188), (25, 38233), (26, 38260),

Gene: MrWormie_34 Start: 39357, Stop: 39677, Start Num: 9

Candidate Starts for MrWormie_34:

(6, 39345), (Start: 9 @39357 has 52 MA's), (12, 39480), (16, 39519), (20, 39561), (22, 39579), (25, 39624),

Gene: Msay19_38 Start: 40159, Stop: 40482, Start Num: 9

Candidate Starts for Msay19_38:

(Start: 9 @40159 has 52 MA's), (11, 40240), (20, 40366), (22, 40384), (25, 40429), (26, 40456),

Gene: Neoevie_34 Start: 40459, Stop: 40779, Start Num: 9

Candidate Starts for Neoevie_34:

(6, 40447), (Start: 9 @40459 has 52 MA's), (12, 40582), (16, 40621), (20, 40663), (22, 40681), (25, 40726),

Gene: Newt_35 Start: 40687, Stop: 41007, Start Num: 9

Candidate Starts for Newt_35:

(6, 40675), (Start: 9 @40687 has 52 MA's), (12, 40810), (16, 40849), (20, 40891), (22, 40909), (25, 40954),

Gene: Niagara_32 Start: 39555, Stop: 39884, Start Num: 8

Candidate Starts for Niagara_32:

(3, 39354), (Start: 8 @39555 has 7 MA's), (10, 39618), (25, 39828), (27, 39861),

Gene: Nimi13_34 Start: 40205, Stop: 40525, Start Num: 9

Candidate Starts for Nimi13_34:

(6, 40193), (Start: 9 @40205 has 52 MA's), (12, 40328), (16, 40367), (20, 40409), (22, 40427), (25, 40472),

Gene: Philon9_34 Start: 40774, Stop: 41100, Start Num: 8

Candidate Starts for Philon9_34:

(Start: 8 @40774 has 7 MA's), (12, 40900), (16, 40942), (17, 40951), (19, 40969), (21, 40999), (23, 41026), (25, 41047), (26, 41074),

Gene: PierreThree_33 Start: 38924, Stop: 39247, Start Num: 9

Candidate Starts for PierreThree_33:

(Start: 9 @38924 has 52 MA's), (10, 38984), (16, 39089), (20, 39131), (22, 39149), (25, 39194),

Gene: PokyPuppy_32 Start: 38870, Stop: 39190, Start Num: 9

Candidate Starts for PokyPuppy_32:

(Start: 9 @38870 has 52 MA's), (10, 38930), (14, 39026), (20, 39074), (22, 39092), (25, 39137),

Gene: Poland_40 Start: 40138, Stop: 40461, Start Num: 9

Candidate Starts for Poland_40:

(Start: 9 @40138 has 52 MA's), (11, 40219), (20, 40345), (22, 40363), (25, 40408), (26, 40435),

Gene: RemRem_34 Start: 37953, Stop: 38276, Start Num: 9

Candidate Starts for RemRem_34:

(Start: 9 @37953 has 52 MA's), (20, 38160), (22, 38178), (25, 38223), (26, 38250),

Gene: RoyalG_34 Start: 38426, Stop: 38749, Start Num: 9

Candidate Starts for RoyalG_34:

(Start: 9 @38426 has 52 MA's), (16, 38591), (22, 38651), (25, 38696),

Gene: Sam12_33 Start: 37953, Stop: 38276, Start Num: 9

Candidate Starts for Sam12_33:

(Start: 9 @37953 has 52 MA's), (20, 38160), (22, 38178), (25, 38223), (26, 38250),

Gene: Shelley_34 Start: 39681, Stop: 40001, Start Num: 9

Candidate Starts for Shelley_34:

(6, 39669), (Start: 9 @39681 has 52 MA's), (12, 39804), (16, 39843), (20, 39885), (22, 39903), (25, 39948),

Gene: Sombrero_33 Start: 37955, Stop: 38278, Start Num: 9

Candidate Starts for Sombrero_33:

(Start: 9 @37955 has 52 MA's), (11, 38036), (20, 38162), (22, 38180), (25, 38225), (26, 38252),

Gene: Squibbles_32 Start: 38816, Stop: 39139, Start Num: 9

Candidate Starts for Squibbles_32:

(Start: 9 @38816 has 52 MA's), (20, 39023), (22, 39041), (25, 39086), (26, 39113),

Gene: SteveFrench_33 Start: 38666, Stop: 38989, Start Num: 9

Candidate Starts for SteveFrench_33:

(Start: 9 @38666 has 52 MA's), (16, 38831), (22, 38891), (25, 38936),

Gene: Sticker17_34 Start: 40196, Stop: 40516, Start Num: 9

Candidate Starts for Sticker17_34:

(6, 40184), (Start: 9 @40196 has 52 MA's), (12, 40319), (16, 40358), (20, 40400), (22, 40418), (25, 40463),

Gene: Teal_34 Start: 40664, Stop: 40984, Start Num: 9

Candidate Starts for Teal_34:

(6, 40652), (Start: 9 @40664 has 52 MA's), (12, 40787), (16, 40826), (20, 40868), (22, 40886), (25, 40931),

Gene: Teatealatte_32 Start: 39500, Stop: 39829, Start Num: 8

Candidate Starts for Teatealatte_32:

(3, 39299), (Start: 8 @39500 has 7 MA's), (10, 39563), (25, 39773), (27, 39806),

Gene: Teech_32 Start: 39301, Stop: 39630, Start Num: 8

Candidate Starts for Teech_32:

(3, 39100), (Start: 8 @39301 has 7 MA's), (10, 39364), (25, 39574), (27, 39607),

Gene: Tredge_32 Start: 39500, Stop: 39829, Start Num: 8

Candidate Starts for Tredge_32:

(3, 39299), (Start: 8 @39500 has 7 MA's), (10, 39563), (25, 39773), (27, 39806),

Gene: Woes_34 Start: 40715, Stop: 41035, Start Num: 9

Candidate Starts for Woes_34:

(6, 40703), (Start: 9 @40715 has 52 MA's), (12, 40838), (16, 40877), (20, 40919), (22, 40937), (25, 40982),