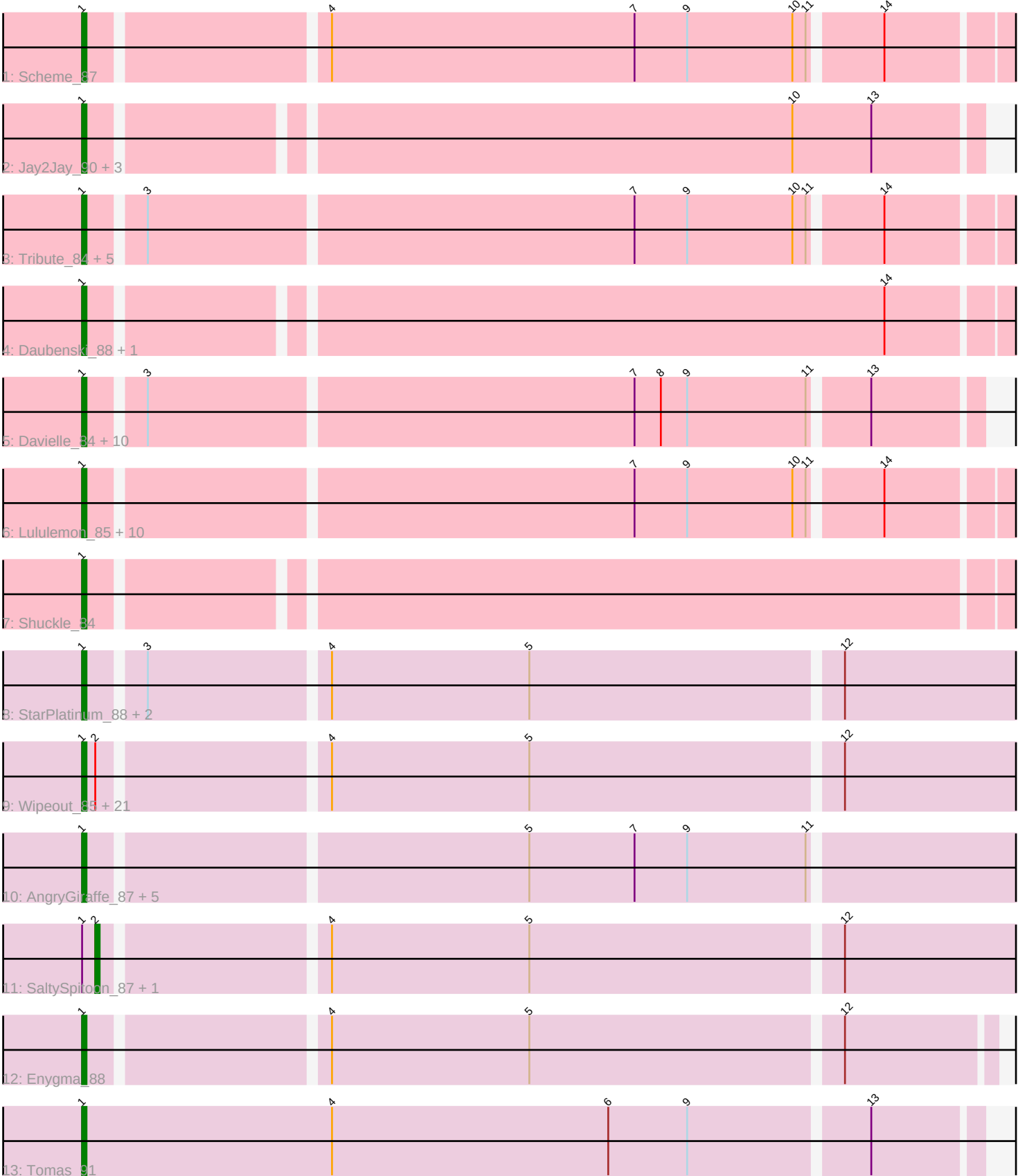




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 280396 Report

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

Pham number 280396 has 71 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Scheme_87
- Track 2 : Jay2Jay_90, Targaryen_86, Warpy_89, Evy_86
- Track 3 : Tribute_84, Peebs_85, Pepperwood_86, Larnav_86, EGole_87, Sushi23_85
- Track 4 : Daubenski_88, Cadmus_85
- Track 5 : Davielle_84, Navo_83, NootNoot_81, Bartholomune_84, Braelyn_86, PinkiePie_84, WhereRU_83, Persimmon_84, Squillum_85, Paradiddles_81, Liandry_84
- Track 6 : Lululemon_85, Cross_86, Coogler_86, Teutsch_86, Cursive_84, PacManQ_85, Watermoore_86, Samisti12_86, HangryHippo_86, Leo04_87, BlueOtter_86
- Track 7 : Shuckle_84
- Track 8 : StarPlatinum_88, LukeCage_87, Mugiwarra_87
- Track 9 : Wipeout_85, Amabiko_88, KentuckyRacer_88, CeilingFan_87, JimJam_88, Gibbi_92, MindFlayer_85, Brizzy_87, Karimac_87, Jollison_87, Starbow_86, IchabodCrane_85, Elmer_90, Spelly_88, Bordeaux_86, Quarant19_87, Battuta_86, PumpkinSpice_87, Birchlyn_85, Spilled_89, TomSawyer_86, Wofford_87
- Track 10 : AngryGiraffe_87, Yaboi_88, BoomerJR_88, Genie2_88, Stanimal_88, Sollertia_88
- Track 11 : SaltySpittoon_87, Rikishi_88
- Track 12 : Enygma_88
- Track 13 : Tomas_91

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 68 of the 70 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_88, AngryGiraffe_87, Bartholomune_84, Battuta_86, Birchlyn_85, BlueOtter_86, BoomerJR_88, Bordeaux_86, Braelyn_86, Brizzy_87, Cadmus_85, CeilingFan_87, Coogler_86, Cross_86, Cursive_84, Daubenski_88, Davielle_84, EGole_87, Elmer_90, Enygma_88, Evy_86, Genie2_88, Gibbi_92, HangryHippo_86, IchabodCrane_85, Jay2Jay_90, JimJam_88, Jollison_87, Karimac_87,

KentuckyRacer_88, Larnav_86, Leo04_87, Liandry_84, LukeCage_87, Lululemon_85, MindFlayer_85, Mugiwara_87, Navo_83, NootNoot_81, PacManQ_85, Paradiddles_81, Peebs_85, Pepperwood_86, Persimmon_84, PinkiePie_84, PumpkinSpice_87, Quarant19_87, Samisti12_86, Scheme_87, Shuckle_84, Sollertia_88, Spelly_88, Spilled_89, Squillum_85, Stanimal_88, StarPlatinum_88, Starbow_86, Sushi23_85, Targaryen_86, Deutsch_86, TomSawyer_86, Tomas_91, Tribute_84, Warpy_89, Watermoore_86, WhereRU_83, Wipeout_85, Wofford_87, Yaboi_88,

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

- Rikishi_88, SaltySpittoon_87,

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

-

Summary by start number:

Start 1:

- Found in 71 of 71 (100.0%) of genes in pham
- Manual Annotations of this start: 68 of 70
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Amabiko_88 (BE2), AngryGiraffe_87 (BE2), Bartholomune_84 (BE1), Battuta_86 (BE2), Birchlyn_85 (BE2), BlueOtter_86 (BE1), BoomerJR_88 (BE2), Bordeaux_86 (BE2), Braelyn_86 (BE1), Brizzy_87 (BE2), Cadmus_85 (BE1), CeilingFan_87 (BE2), Coogler_86 (BE1), Cross_86 (BE1), Cursive_84 (BE1), Daubenski_88 (BE1), Davielle_84 (BE1), EGole_87 (BE1), Elmer_90 (BE2), Enigma_88 (BE2), Evy_86 (BE1), Genie2_88 (BE2), Gibbi_92 (BE2), HangryHippo_86 (BE1), IchabodCrane_85 (BE2), Jay2Jay_90 (BE1), JimJam_88 (BE2), Jollison_87 (BE2), Karimac_87 (BE2), KentuckyRacer_88 (BE2), Larnav_86 (BE1), Leo04_87 (BE1), Liandry_84 (BE1), LukeCage_87 (BE2), Lululemon_85 (BE1), MindFlayer_85 (BE2), Mugiwara_87 (BE2), Navo_83 (BE1), NootNoot_81 (BE1), PacManQ_85 (BE1), Paradiddles_81 (BE1), Peebs_85 (BE1), Pepperwood_86 (BE1), Persimmon_84 (BE1), PinkiePie_84 (BE1), PumpkinSpice_87 (BE2), Quarant19_87 (BE2), Samisti12_86 (BE1), Scheme_87 (BE1), Shuckle_84 (BE1), Sollertia_88 (BE2), Spelly_88 (BE2), Spilled_89 (BE2), Squillum_85 (BE1), Stanimal_88 (BE2), StarPlatinum_88 (BE2), Starbow_86 (BE2), Sushi23_85 (BE1), Targaryen_86 (BE1), Deutsch_86 (BE1), TomSawyer_86 (BE2), Tomas_91 (BE2), Tribute_84 (BE1), Warpy_89 (BE1), Watermoore_86 (BE1), WhereRU_83 (BE1), Wipeout_85 (BE2), Wofford_87 (BE2), Yaboi_88 (BE2),

Start 2:

- Found in 24 of 71 (33.8%) of genes in pham
- Manual Annotations of this start: 2 of 70
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Rikishi_88 (BE2), SaltySpittoon_87 (BE2),

Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:

- Start number 1 was manually annotated 36 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 1 was manually annotated 32 times for cluster BE2.
- Start number 2 was manually annotated 2 times for cluster BE2.

Gene Information:

Gene: Amabiko_88 Start: 63980, Stop: 64192, Start Num: 1

Candidate Starts for Amabiko_88:

(Start: 1 @63980 has 68 MA's), (Start: 2 @63983 has 2 MA's), (4, 64031), (5, 64076), (12, 64145),

Gene: AngryGiraffe_87 Start: 63927, Stop: 64139, Start Num: 1

Candidate Starts for AngryGiraffe_87:

(Start: 1 @63927 has 68 MA's), (5, 64023), (7, 64047), (9, 64059), (11, 64086),

Gene: Bartholomune_84 Start: 63348, Stop: 63542, Start Num: 1

Candidate Starts for Bartholomune_84:

(Start: 1 @63348 has 68 MA's), (3, 63360), (7, 63468), (8, 63474), (9, 63480), (11, 63507), (13, 63519),

Gene: Battuta_86 Start: 63954, Stop: 64166, Start Num: 1

Candidate Starts for Battuta_86:

(Start: 1 @63954 has 68 MA's), (Start: 2 @63957 has 2 MA's), (4, 64005), (5, 64050), (12, 64119),

Gene: Birchlyn_85 Start: 61837, Stop: 62049, Start Num: 1

Candidate Starts for Birchlyn_85:

(Start: 1 @61837 has 68 MA's), (Start: 2 @61840 has 2 MA's), (4, 61888), (5, 61933), (12, 62002),

Gene: BlueOtter_86 Start: 64692, Stop: 64901, Start Num: 1

Candidate Starts for BlueOtter_86:

(Start: 1 @64692 has 68 MA's), (7, 64812), (9, 64824), (10, 64848), (11, 64851), (14, 64866),

Gene: BoomerJR_88 Start: 63816, Stop: 64028, Start Num: 1

Candidate Starts for BoomerJR_88:

(Start: 1 @63816 has 68 MA's), (5, 63912), (7, 63936), (9, 63948), (11, 63975),

Gene: Bordeaux_86 Start: 64109, Stop: 64321, Start Num: 1

Candidate Starts for Bordeaux_86:

(Start: 1 @64109 has 68 MA's), (Start: 2 @64112 has 2 MA's), (4, 64160), (5, 64205), (12, 64274),

Gene: Braelyn_86 Start: 64112, Stop: 64306, Start Num: 1

Candidate Starts for Braelyn_86:

(Start: 1 @64112 has 68 MA's), (3, 64124), (7, 64232), (8, 64238), (9, 64244), (11, 64271), (13, 64283),

Gene: Brizzy_87 Start: 63628, Stop: 63840, Start Num: 1

Candidate Starts for Brizzy_87:

(Start: 1 @63628 has 68 MA's), (Start: 2 @63631 has 2 MA's), (4, 63679), (5, 63724), (12, 63793),

Gene: Cadmus_85 Start: 63644, Stop: 63853, Start Num: 1

Candidate Starts for Cadmus_85:

(Start: 1 @63644 has 68 MA's), (14, 63818),

Gene: CeilingFan_87 Start: 63869, Stop: 64081, Start Num: 1
Candidate Starts for CeilingFan_87:
(Start: 1 @63869 has 68 MA's), (Start: 2 @63872 has 2 MA's), (4, 63920), (5, 63965), (12, 64034),

Gene: Coogler_86 Start: 64718, Stop: 64927, Start Num: 1
Candidate Starts for Coogler_86:
(Start: 1 @64718 has 68 MA's), (7, 64838), (9, 64850), (10, 64874), (11, 64877), (14, 64892),

Gene: Cross_86 Start: 64693, Stop: 64902, Start Num: 1
Candidate Starts for Cross_86:
(Start: 1 @64693 has 68 MA's), (7, 64813), (9, 64825), (10, 64849), (11, 64852), (14, 64867),

Gene: Cursive_84 Start: 64218, Stop: 64427, Start Num: 1
Candidate Starts for Cursive_84:
(Start: 1 @64218 has 68 MA's), (7, 64338), (9, 64350), (10, 64374), (11, 64377), (14, 64392),

Gene: Daubenski_88 Start: 64408, Stop: 64617, Start Num: 1
Candidate Starts for Daubenski_88:
(Start: 1 @64408 has 68 MA's), (14, 64582),

Gene: Davielle_84 Start: 63532, Stop: 63726, Start Num: 1
Candidate Starts for Davielle_84:
(Start: 1 @63532 has 68 MA's), (3, 63544), (7, 63652), (8, 63658), (9, 63664), (11, 63691), (13, 63703),

Gene: EGole_87 Start: 65638, Stop: 65847, Start Num: 1
Candidate Starts for EGole_87:
(Start: 1 @65638 has 68 MA's), (3, 65650), (7, 65758), (9, 65770), (10, 65794), (11, 65797), (14, 65812),

Gene: Elmer_90 Start: 65056, Stop: 65268, Start Num: 1
Candidate Starts for Elmer_90:
(Start: 1 @65056 has 68 MA's), (Start: 2 @65059 has 2 MA's), (4, 65107), (5, 65152), (12, 65221),

Gene: Enygma_88 Start: 65756, Stop: 65953, Start Num: 1
Candidate Starts for Enygma_88:
(Start: 1 @65756 has 68 MA's), (4, 65807), (5, 65852), (12, 65921),

Gene: Evy_86 Start: 64593, Stop: 64787, Start Num: 1
Candidate Starts for Evy_86:
(Start: 1 @64593 has 68 MA's), (10, 64746), (13, 64764),

Gene: Genie2_88 Start: 63930, Stop: 64142, Start Num: 1
Candidate Starts for Genie2_88:
(Start: 1 @63930 has 68 MA's), (5, 64026), (7, 64050), (9, 64062), (11, 64089),

Gene: Gibbi_92 Start: 64092, Stop: 64304, Start Num: 1
Candidate Starts for Gibbi_92:
(Start: 1 @64092 has 68 MA's), (Start: 2 @64095 has 2 MA's), (4, 64143), (5, 64188), (12, 64257),

Gene: HangryHippo_86 Start: 64692, Stop: 64901, Start Num: 1
Candidate Starts for HangryHippo_86:
(Start: 1 @64692 has 68 MA's), (7, 64812), (9, 64824), (10, 64848), (11, 64851), (14, 64866),

Gene: IchabodCrane_85 Start: 63681, Stop: 63893, Start Num: 1
Candidate Starts for IchabodCrane_85:
(Start: 1 @63681 has 68 MA's), (Start: 2 @63684 has 2 MA's), (4, 63732), (5, 63777), (12, 63846),

Gene: Jay2Jay_90 Start: 65445, Stop: 65639, Start Num: 1
Candidate Starts for Jay2Jay_90:
(Start: 1 @65445 has 68 MA's), (10, 65598), (13, 65616),

Gene: JimJam_88 Start: 64055, Stop: 64267, Start Num: 1
Candidate Starts for JimJam_88:
(Start: 1 @64055 has 68 MA's), (Start: 2 @64058 has 2 MA's), (4, 64106), (5, 64151), (12, 64220),

Gene: Jollison_87 Start: 63937, Stop: 64149, Start Num: 1
Candidate Starts for Jollison_87:
(Start: 1 @63937 has 68 MA's), (Start: 2 @63940 has 2 MA's), (4, 63988), (5, 64033), (12, 64102),

Gene: Karimac_87 Start: 64086, Stop: 64298, Start Num: 1
Candidate Starts for Karimac_87:
(Start: 1 @64086 has 68 MA's), (Start: 2 @64089 has 2 MA's), (4, 64137), (5, 64182), (12, 64251),

Gene: KentuckyRacer_88 Start: 63870, Stop: 64082, Start Num: 1
Candidate Starts for KentuckyRacer_88:
(Start: 1 @63870 has 68 MA's), (Start: 2 @63873 has 2 MA's), (4, 63921), (5, 63966), (12, 64035),

Gene: Larnav_86 Start: 64677, Stop: 64886, Start Num: 1
Candidate Starts for Larnav_86:
(Start: 1 @64677 has 68 MA's), (3, 64689), (7, 64797), (9, 64809), (10, 64833), (11, 64836), (14, 64851),

Gene: Leo04_87 Start: 65192, Stop: 65401, Start Num: 1
Candidate Starts for Leo04_87:
(Start: 1 @65192 has 68 MA's), (7, 65312), (9, 65324), (10, 65348), (11, 65351), (14, 65366),

Gene: Liandry_84 Start: 64097, Stop: 64291, Start Num: 1
Candidate Starts for Liandry_84:
(Start: 1 @64097 has 68 MA's), (3, 64109), (7, 64217), (8, 64223), (9, 64229), (11, 64256), (13, 64268),

Gene: LukeCage_87 Start: 63843, Stop: 64055, Start Num: 1
Candidate Starts for LukeCage_87:
(Start: 1 @63843 has 68 MA's), (3, 63855), (4, 63894), (5, 63939), (12, 64008),

Gene: Lululemon_85 Start: 64073, Stop: 64282, Start Num: 1
Candidate Starts for Lululemon_85:
(Start: 1 @64073 has 68 MA's), (7, 64193), (9, 64205), (10, 64229), (11, 64232), (14, 64247),

Gene: MindFlayer_85 Start: 63588, Stop: 63800, Start Num: 1
Candidate Starts for MindFlayer_85:
(Start: 1 @63588 has 68 MA's), (Start: 2 @63591 has 2 MA's), (4, 63639), (5, 63684), (12, 63753),

Gene: Mugiwara_87 Start: 64342, Stop: 64554, Start Num: 1
Candidate Starts for Mugiwara_87:
(Start: 1 @64342 has 68 MA's), (3, 64354), (4, 64393), (5, 64438), (12, 64507),

Gene: Navo_83 Start: 64016, Stop: 64210, Start Num: 1

Candidate Starts for Navo_83:

(Start: 1 @64016 has 68 MA's), (3, 64028), (7, 64136), (8, 64142), (9, 64148), (11, 64175), (13, 64187),

Gene: NootNoot_81 Start: 63011, Stop: 63205, Start Num: 1

Candidate Starts for NootNoot_81:

(Start: 1 @63011 has 68 MA's), (3, 63023), (7, 63131), (8, 63137), (9, 63143), (11, 63170), (13, 63182),

Gene: PacManQ_85 Start: 64073, Stop: 64282, Start Num: 1

Candidate Starts for PacManQ_85:

(Start: 1 @64073 has 68 MA's), (7, 64193), (9, 64205), (10, 64229), (11, 64232), (14, 64247),

Gene: Paradiddles_81 Start: 63275, Stop: 63469, Start Num: 1

Candidate Starts for Paradiddles_81:

(Start: 1 @63275 has 68 MA's), (3, 63287), (7, 63395), (8, 63401), (9, 63407), (11, 63434), (13, 63446),

Gene: Peebs_85 Start: 64427, Stop: 64636, Start Num: 1

Candidate Starts for Peebs_85:

(Start: 1 @64427 has 68 MA's), (3, 64439), (7, 64547), (9, 64559), (10, 64583), (11, 64586), (14, 64601),

Gene: Pepperwood_86 Start: 64560, Stop: 64769, Start Num: 1

Candidate Starts for Pepperwood_86:

(Start: 1 @64560 has 68 MA's), (3, 64572), (7, 64680), (9, 64692), (10, 64716), (11, 64719), (14, 64734),

Gene: Persimmon_84 Start: 62944, Stop: 63138, Start Num: 1

Candidate Starts for Persimmon_84:

(Start: 1 @62944 has 68 MA's), (3, 62956), (7, 63064), (8, 63070), (9, 63076), (11, 63103), (13, 63115),

Gene: PinkiePie_84 Start: 64097, Stop: 64291, Start Num: 1

Candidate Starts for PinkiePie_84:

(Start: 1 @64097 has 68 MA's), (3, 64109), (7, 64217), (8, 64223), (9, 64229), (11, 64256), (13, 64268),

Gene: PumpkinSpice_87 Start: 63980, Stop: 64192, Start Num: 1

Candidate Starts for PumpkinSpice_87:

(Start: 1 @63980 has 68 MA's), (Start: 2 @63983 has 2 MA's), (4, 64031), (5, 64076), (12, 64145),

Gene: Quaran19_87 Start: 63971, Stop: 64183, Start Num: 1

Candidate Starts for Quaran19_87:

(Start: 1 @63971 has 68 MA's), (Start: 2 @63974 has 2 MA's), (4, 64022), (5, 64067), (12, 64136),

Gene: Rikishi_88 Start: 63889, Stop: 64098, Start Num: 2

Candidate Starts for Rikishi_88:

(Start: 1 @63886 has 68 MA's), (Start: 2 @63889 has 2 MA's), (4, 63937), (5, 63982), (12, 64051),

Gene: SaltySpittoon_87 Start: 63983, Stop: 64192, Start Num: 2

Candidate Starts for SaltySpittoon_87:

(Start: 1 @63980 has 68 MA's), (Start: 2 @63983 has 2 MA's), (4, 64031), (5, 64076), (12, 64145),

Gene: Samisti12_86 Start: 65869, Stop: 66078, Start Num: 1

Candidate Starts for Samisti12_86:

(Start: 1 @65869 has 68 MA's), (7, 65989), (9, 66001), (10, 66025), (11, 66028), (14, 66043),

Gene: Scheme_87 Start: 65274, Stop: 65483, Start Num: 1

Candidate Starts for Scheme_87:

(Start: 1 @65274 has 68 MA's), (4, 65325), (7, 65394), (9, 65406), (10, 65430), (11, 65433), (14, 65448),

Gene: Shuckle_84 Start: 64882, Stop: 65091, Start Num: 1

Candidate Starts for Shuckle_84:

(Start: 1 @64882 has 68 MA's),

Gene: Sollertia_88 Start: 63930, Stop: 64142, Start Num: 1

Candidate Starts for Sollertia_88:

(Start: 1 @63930 has 68 MA's), (5, 64026), (7, 64050), (9, 64062), (11, 64089),

Gene: Spelly_88 Start: 63935, Stop: 64147, Start Num: 1

Candidate Starts for Spelly_88:

(Start: 1 @63935 has 68 MA's), (Start: 2 @63938 has 2 MA's), (4, 63986), (5, 64031), (12, 64100),

Gene: Spilled_89 Start: 64052, Stop: 64264, Start Num: 1

Candidate Starts for Spilled_89:

(Start: 1 @64052 has 68 MA's), (Start: 2 @64055 has 2 MA's), (4, 64103), (5, 64148), (12, 64217),

Gene: Squillium_85 Start: 64098, Stop: 64292, Start Num: 1

Candidate Starts for Squillium_85:

(Start: 1 @64098 has 68 MA's), (3, 64110), (7, 64218), (8, 64224), (9, 64230), (11, 64257), (13, 64269),

Gene: Stanimal_88 Start: 63819, Stop: 64031, Start Num: 1

Candidate Starts for Stanimal_88:

(Start: 1 @63819 has 68 MA's), (5, 63915), (7, 63939), (9, 63951), (11, 63978),

Gene: StarPlatinum_88 Start: 64488, Stop: 64700, Start Num: 1

Candidate Starts for StarPlatinum_88:

(Start: 1 @64488 has 68 MA's), (3, 64500), (4, 64539), (5, 64584), (12, 64653),

Gene: Starbow_86 Start: 63956, Stop: 64168, Start Num: 1

Candidate Starts for Starbow_86:

(Start: 1 @63956 has 68 MA's), (Start: 2 @63959 has 2 MA's), (4, 64007), (5, 64052), (12, 64121),

Gene: Sushi23_85 Start: 64785, Stop: 64994, Start Num: 1

Candidate Starts for Sushi23_85:

(Start: 1 @64785 has 68 MA's), (3, 64797), (7, 64905), (9, 64917), (10, 64941), (11, 64944), (14, 64959),

Gene: Targaryen_86 Start: 65495, Stop: 65689, Start Num: 1

Candidate Starts for Targaryen_86:

(Start: 1 @65495 has 68 MA's), (10, 65648), (13, 65666),

Gene: Deutsch_86 Start: 65048, Stop: 65257, Start Num: 1

Candidate Starts for Deutsch_86:

(Start: 1 @65048 has 68 MA's), (7, 65168), (9, 65180), (10, 65204), (11, 65207), (14, 65222),

Gene: TomSawyer_86 Start: 63571, Stop: 63783, Start Num: 1

Candidate Starts for TomSawyer_86:

(Start: 1 @63571 has 68 MA's), (Start: 2 @63574 has 2 MA's), (4, 63622), (5, 63667), (12, 63736),

Gene: Tomas_91 Start: 66894, Stop: 67094, Start Num: 1

Candidate Starts for Tomas_91:

(Start: 1 @66894 has 68 MA's), (4, 66951), (6, 67014), (9, 67032), (13, 67071),

Gene: Tribute_84 Start: 64254, Stop: 64463, Start Num: 1

Candidate Starts for Tribute_84:

(Start: 1 @64254 has 68 MA's), (3, 64266), (7, 64374), (9, 64386), (10, 64410), (11, 64413), (14, 64428),

Gene: Warpy_89 Start: 64958, Stop: 65152, Start Num: 1

Candidate Starts for Warpy_89:

(Start: 1 @64958 has 68 MA's), (10, 65111), (13, 65129),

Gene: Watermoore_86 Start: 65264, Stop: 65473, Start Num: 1

Candidate Starts for Watermoore_86:

(Start: 1 @65264 has 68 MA's), (7, 65384), (9, 65396), (10, 65420), (11, 65423), (14, 65438),

Gene: WhereRU_83 Start: 63532, Stop: 63726, Start Num: 1

Candidate Starts for WhereRU_83:

(Start: 1 @63532 has 68 MA's), (3, 63544), (7, 63652), (8, 63658), (9, 63664), (11, 63691), (13, 63703),

Gene: Wipeout_85 Start: 64322, Stop: 64534, Start Num: 1

Candidate Starts for Wipeout_85:

(Start: 1 @64322 has 68 MA's), (Start: 2 @64325 has 2 MA's), (4, 64373), (5, 64418), (12, 64487),

Gene: Wofford_87 Start: 65019, Stop: 65231, Start Num: 1

Candidate Starts for Wofford_87:

(Start: 1 @65019 has 68 MA's), (Start: 2 @65022 has 2 MA's), (4, 65070), (5, 65115), (12, 65184),

Gene: Yaboi_88 Start: 63907, Stop: 64119, Start Num: 1

Candidate Starts for Yaboi_88:

(Start: 1 @63907 has 68 MA's), (5, 64003), (7, 64027), (9, 64039), (11, 64066),