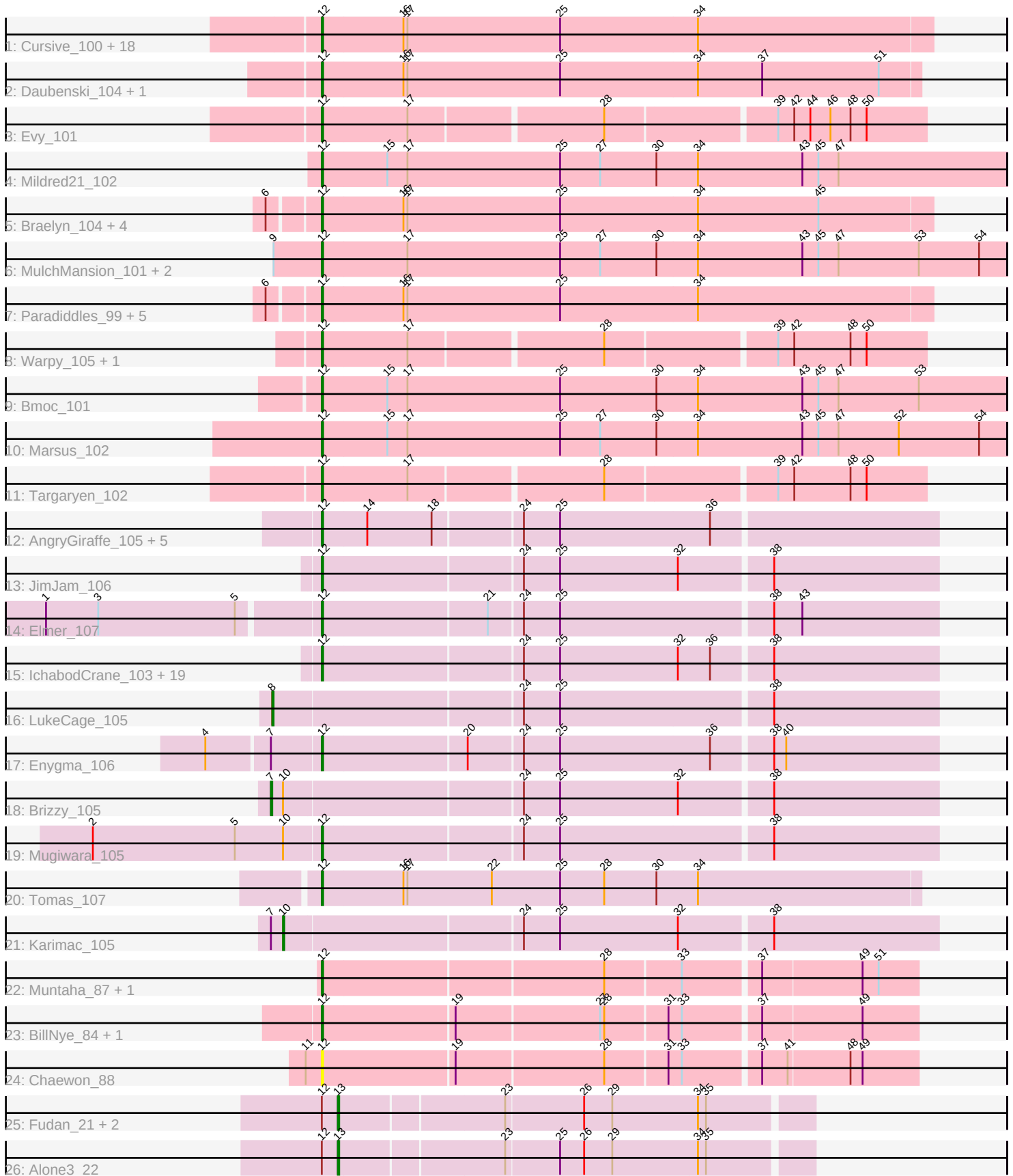


Pham 276107



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 276107 Report

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

Pham number 276107 has 85 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Cursive_100, Sushi23_101, PacManQ_101, BlueOtter_102, EGole_103, Larnav_102, Cross_102, Samisti12_102, Tribute_101, Scheme_103, Watermoore_101, Leo04_103, Peebs_101, Shuckle_100, HangryHippo_102, Lululemon_101, Deutsch_102, Pepperwood_102, Coogler_102
- Track 2 : Daubenski_104, Cadmus_100
- Track 3 : Evy_101
- Track 4 : Mildred21_102
- Track 5 : Braelyn_104, Davielle_100, Navo_100, Persimmon_102, WhereRU_99
- Track 6 : MulchMansion_101, Angela_101, LilMartin_101
- Track 7 : Paradiddles_99, Liandry_102, Squillium_103, Bartholomune_102, NootNoot_99, PinkiePie_102
- Track 8 : Warpy_105, Jay2Jay_106
- Track 9 : Bmoc_101
- Track 10 : Marsus_102
- Track 11 : Targaryen_102
- Track 12 : AngryGiraffe_105, BoomerJR_106, Genie2_106, Sollertia_106, Stanimal_106, Yaboi_106
- Track 13 : JimJam_106
- Track 14 : Elmer_107
- Track 15 : IchabodCrane_103, Jollison_105, CeilingFan_105, SaltySpitoon_105, TomSawyer_104, Birchlyn_103, AcciDwight_109, PumpkinSpice_105, Starbow_104, Bordeaux_104, Amabiko_106, KentuckyRacer_106, Rikishi_105, Spelly_106, Gibbi_110, Quarant19_105, Battuta_104, MindFlayer_103, Wipeout_103, Spilled_107
- Track 16 : LukeCage_105
- Track 17 : Enygma_106
- Track 18 : Brizzy_105
- Track 19 : Mugiwara_105
- Track 20 : Tomas_107
- Track 21 : Karimac_105
- Track 22 : Muntaha_87, Wakanda_85
- Track 23 : BillNye_84, Circinus_85
- Track 24 : Chaewon_88
- Track 25 : Fudan_21, LuckySocke_20, Beleetus_20
- Track 26 : Alone3_22

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

The start number called the most often in the published annotations is 12, it was called in 75 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AcciDwight_109, Amabiko_106, Angela_101, AngryGiraffe_105, Bartholomune_102, Battuta_104, BillNye_84, Birchlyn_103, BlueOtter_102, Bmoc_101, BoomerJR_106, Bordeaux_104, Braelyn_104, Cadmus_100, CeilingFan_105, Chaewon_88, Circinus_85, Coogler_102, Cross_102, Cursive_100, Daubenski_104, Davielle_100, EGole_103, Elmer_107, Enygma_106, Evy_101, Genie2_106, Gibbi_110, HangryHippo_102, IchabodCrane_103, Jay2Jay_106, JimJam_106, Jollison_105, KentuckyRacer_106, Larnav_102, Leo04_103, Liandry_102, LilMartin_101, Lululemon_101, Marsus_102, Mildred21_102, MindFlayer_103, Mugiwarra_105, MulchMansion_101, Muntaha_87, Navo_100, NootNoot_99, PacManQ_101, Paradiddles_99, Peebs_101, Pepperwood_102, Persimmon_102, PinkiePie_102, PumpkinSpice_105, Quarant19_105, Rikishi_105, SaltySpitoon_105, Samisti12_102, Scheme_103, Shuckle_100, Sollertia_106, Spelly_106, Spilled_107, Squillium_103, Stanimal_106, Starbow_104, Sushi23_101, Targaryen_102, Teutsch_102, TomSawyer_104, Tomas_107, Tribute_101, Wakanda_85, Warpy_105, Watermoore_101, WhereRU_99, Wipeout_103, Yaboi_106,

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

- Alone3_22, Beleetus_20, Fudan_21, LuckySocks_20,

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

- Brizzy_105, Karimac_105, LukeCage_105,

Summary by start number:

Start 7:

- Found in 3 of 85 (3.5%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Brizzy_105 (BE2),

Start 8:

- Found in 1 of 85 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LukeCage_105 (BE2),

Start 10:

- Found in 3 of 85 (3.5%) of genes in pham
- Manual Annotations of this start: 1 of 80
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Karimac_105 (BE2),

Start 12:

- Found in 82 of 85 (96.5%) of genes in pham
- Manual Annotations of this start: 75 of 80
- Called 95.1% of time when present

- Phage (with cluster) where this start called: AcciDwight_109 (BE2), Amabiko_106 (BE2), Angela_101 (BE1), AngryGiraffe_105 (BE2), Bartholomune_102 (BE1), Battuta_104 (BE2), BillNye_84 (BK2), Birchlyn_103 (BE2), BlueOtter_102 (BE1), Bmoc_101 (BE1), BoomerJR_106 (BE2), Bordeaux_104 (BE2), Braelyn_104 (BE1), Cadmus_100 (BE1), CeilingFan_105 (BE2), Chaewon_88 (BK2), Circinus_85 (BK2), Coogler_102 (BE1), Cross_102 (BE1), Cursive_100 (BE1), Daubenski_104 (BE1), Davielle_100 (BE1), EGole_103 (BE1), Elmer_107 (BE2), Enygma_106 (BE2), Evy_101 (BE1), Genie2_106 (BE2), Gibbi_110 (BE2), HangryHippo_102 (BE1), IchabodCrane_103 (BE2), Jay2Jay_106 (BE1), JimJam_106 (BE2), Jollison_105 (BE2), KentuckyRacer_106 (BE2), Larnav_102 (BE1), Leo04_103 (BE1), Liandry_102 (BE1), LilMartin_101 (BE1), Lululemon_101 (BE1), Marsus_102 (BE1), Mildred21_102 (BE1), MindFlayer_103 (BE2), Mugiwara_105 (BE2), MulchMansion_101 (BE1), Muntaha_87 (BK2), Navo_100 (BE1), NootNoot_99 (BE1), PacManQ_101 (BE1), Paradiddles_99 (BE1), Peebs_101 (BE1), Pepperwood_102 (BE1), Persimmon_102 (BE1), PinkiePie_102 (BE1), PumpkinSpice_105 (BE2), Quarant19_105 (BE2), Rikishi_105 (BE2), SaltySpittoon_105 (BE2), Samisti12_102 (BE1), Scheme_103 (BE1), Shuckle_100 (BE1), Sollertia_106 (BE2), Spelly_106 (BE2), Spilled_107 (BE2), Squillium_103 (BE1), Stanimal_106 (BE2), Starbow_104 (BE2), Sushi23_101 (BE1), Targaryen_102 (BE1), Teutsch_102 (BE1), TomSawyer_104 (BE2), Tomas_107 (BE2), Tribute_101 (BE1), Wakanda_85 (BK2), Warpy_105 (BE1), Watermoore_101 (BE1), WhereRU_99 (BE1), Wipeout_103 (BE2), Yaboi_106 (BE2),

Start 13:

- Found in 4 of 85 (4.7%) of genes in pham
- Manual Annotations of this start: 2 of 80
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alone3_22 (BS), Beleetus_20 (BS), Fudan_21 (BS), LuckySocks_20 (BS),

Summary by clusters:

There are 4 clusters represented in this pham: BE2, BE1, BK2, BS,

Info for manual annotations of cluster BE1:

- Start number 12 was manually annotated 42 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 7 was manually annotated 1 time for cluster BE2.
- Start number 8 was manually annotated 1 time for cluster BE2.
- Start number 10 was manually annotated 1 time for cluster BE2.
- Start number 12 was manually annotated 29 times for cluster BE2.

Info for manual annotations of cluster BK2:

- Start number 12 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster BS:

- Start number 13 was manually annotated 2 times for cluster BS.

Gene Information:

Gene: AcciDwight_109 Start: 72823, Stop: 73269, Start Num: 12
Candidate Starts for AcciDwight_109:
(Start: 12 @72823 has 75 MA's), (24, 72967), (25, 72994), (32, 73081), (36, 73105), (38, 73147),

Gene: Alone3_22 Start: 7489, Stop: 7827, Start Num: 13
Candidate Starts for Alone3_22:
(Start: 12 @7477 has 75 MA's), (Start: 13 @7489 has 2 MA's), (23, 7606), (25, 7645), (26, 7663), (29, 7684), (34, 7747), (35, 7753),

Gene: Amabiko_106 Start: 72868, Stop: 73314, Start Num: 12
Candidate Starts for Amabiko_106:
(Start: 12 @72868 has 75 MA's), (24, 73012), (25, 73039), (32, 73126), (36, 73150), (38, 73192),

Gene: Angela_101 Start: 72019, Stop: 72528, Start Num: 12
Candidate Starts for Angela_101:
(9, 71983), (Start: 12 @72019 has 75 MA's), (17, 72082), (25, 72196), (27, 72226), (30, 72268), (34, 72298), (43, 72376), (45, 72388), (47, 72403), (53, 72463), (54, 72508),

Gene: AngryGiraffe_105 Start: 72927, Stop: 73373, Start Num: 12
Candidate Starts for AngryGiraffe_105:
(Start: 12 @72927 has 75 MA's), (14, 72960), (18, 73008), (24, 73071), (25, 73098), (36, 73209),

Gene: Bartholomune_102 Start: 72412, Stop: 72864, Start Num: 12
Candidate Starts for Bartholomune_102:
(6, 72379), (Start: 12 @72412 has 75 MA's), (16, 72472), (17, 72475), (25, 72589), (34, 72691),

Gene: Battuta_104 Start: 72842, Stop: 73288, Start Num: 12
Candidate Starts for Battuta_104:
(Start: 12 @72842 has 75 MA's), (24, 72986), (25, 73013), (32, 73100), (36, 73124), (38, 73166),

Gene: Beleetus_20 Start: 6988, Stop: 7326, Start Num: 13
Candidate Starts for Beleetus_20:
(Start: 12 @6976 has 75 MA's), (Start: 13 @6988 has 2 MA's), (23, 7105), (26, 7162), (29, 7183), (34, 7246), (35, 7252),

Gene: BillNye_84 Start: 67275, Stop: 67700, Start Num: 12
Candidate Starts for BillNye_84:
(Start: 12 @67275 has 75 MA's), (19, 67371), (27, 67476), (28, 67479), (31, 67524), (33, 67533), (37, 67587), (49, 67659),

Gene: Birchlyn_103 Start: 70728, Stop: 71174, Start Num: 12
Candidate Starts for Birchlyn_103:
(Start: 12 @70728 has 75 MA's), (24, 70872), (25, 70899), (32, 70986), (36, 71010), (38, 71052),

Gene: BlueOtter_102 Start: 72816, Stop: 73268, Start Num: 12
Candidate Starts for BlueOtter_102:
(Start: 12 @72816 has 75 MA's), (16, 72876), (17, 72879), (25, 72993), (34, 73095),

Gene: Bmoc_101 Start: 72064, Stop: 72573, Start Num: 12
Candidate Starts for Bmoc_101:
(Start: 12 @72064 has 75 MA's), (15, 72112), (17, 72127), (25, 72241), (30, 72313), (34, 72343), (43, 72421), (45, 72433), (47, 72448), (53, 72508),

Gene: BoomerJR_106 Start: 72816, Stop: 73262, Start Num: 12

Candidate Starts for BoomerJR_106:

(Start: 12 @72816 has 75 MA's), (14, 72849), (18, 72897), (24, 72960), (25, 72987), (36, 73098),

Gene: Bordeaux_104 Start: 72997, Stop: 73443, Start Num: 12

Candidate Starts for Bordeaux_104:

(Start: 12 @72997 has 75 MA's), (24, 73141), (25, 73168), (32, 73255), (36, 73279), (38, 73321),

Gene: Braelyn_104 Start: 73301, Stop: 73753, Start Num: 12

Candidate Starts for Braelyn_104:

(6, 73268), (Start: 12 @73301 has 75 MA's), (16, 73361), (17, 73364), (25, 73478), (34, 73580), (45, 73670),

Gene: Brizzy_105 Start: 72610, Stop: 73092, Start Num: 7

Candidate Starts for Brizzy_105:

(Start: 7 @72610 has 1 MA's), (Start: 10 @72619 has 1 MA's), (24, 72790), (25, 72817), (32, 72904), (38, 72970),

Gene: Cadmus_100 Start: 71667, Stop: 72110, Start Num: 12

Candidate Starts for Cadmus_100:

(Start: 12 @71667 has 75 MA's), (16, 71727), (17, 71730), (25, 71844), (34, 71946), (37, 71994), (51, 72081),

Gene: CeilingFan_105 Start: 72760, Stop: 73206, Start Num: 12

Candidate Starts for CeilingFan_105:

(Start: 12 @72760 has 75 MA's), (24, 72904), (25, 72931), (32, 73018), (36, 73042), (38, 73084),

Gene: Chaewon_88 Start: 67249, Stop: 67674, Start Num: 12

Candidate Starts for Chaewon_88:

(11, 67237), (Start: 12 @67249 has 75 MA's), (19, 67345), (28, 67453), (31, 67498), (33, 67507), (37, 67561), (41, 67579), (48, 67624), (49, 67633),

Gene: Circinus_85 Start: 67263, Stop: 67688, Start Num: 12

Candidate Starts for Circinus_85:

(Start: 12 @67263 has 75 MA's), (19, 67359), (27, 67464), (28, 67467), (31, 67512), (33, 67521), (37, 67575), (49, 67647),

Gene: Coogler_102 Start: 72842, Stop: 73294, Start Num: 12

Candidate Starts for Coogler_102:

(Start: 12 @72842 has 75 MA's), (16, 72902), (17, 72905), (25, 73019), (34, 73121),

Gene: Cross_102 Start: 72817, Stop: 73269, Start Num: 12

Candidate Starts for Cross_102:

(Start: 12 @72817 has 75 MA's), (16, 72877), (17, 72880), (25, 72994), (34, 73096),

Gene: Cursive_100 Start: 72342, Stop: 72794, Start Num: 12

Candidate Starts for Cursive_100:

(Start: 12 @72342 has 75 MA's), (16, 72402), (17, 72405), (25, 72519), (34, 72621),

Gene: Daubenski_104 Start: 72431, Stop: 72874, Start Num: 12

Candidate Starts for Daubenski_104:

(Start: 12 @72431 has 75 MA's), (16, 72491), (17, 72494), (25, 72608), (34, 72710), (37, 72758), (51, 72845),

Gene: Davielle_100 Start: 72355, Stop: 72807, Start Num: 12

Candidate Starts for Davielle_100:

(6, 72322), (Start: 12 @72355 has 75 MA's), (16, 72415), (17, 72418), (25, 72532), (34, 72634), (45, 72724),

Gene: EGole_103 Start: 73664, Stop: 74116, Start Num: 12

Candidate Starts for EGole_103:

(Start: 12 @73664 has 75 MA's), (16, 73724), (17, 73727), (25, 73841), (34, 73943),

Gene: Elmer_107 Start: 73295, Stop: 73741, Start Num: 12

Candidate Starts for Elmer_107:

(1, 73097), (3, 73136), (5, 73238), (Start: 12 @73295 has 75 MA's), (21, 73415), (24, 73439), (25, 73466), (38, 73619), (43, 73640),

Gene: Enygma_106 Start: 74654, Stop: 75100, Start Num: 12

Candidate Starts for Enygma_106:

(4, 74573), (Start: 7 @74618 has 1 MA's), (Start: 12 @74654 has 75 MA's), (20, 74759), (24, 74798), (25, 74825), (36, 74936), (38, 74978), (40, 74987),

Gene: Evy_101 Start: 72801, Stop: 73232, Start Num: 12

Candidate Starts for Evy_101:

(Start: 12 @72801 has 75 MA's), (17, 72864), (28, 73002), (39, 73122), (42, 73134), (44, 73146), (46, 73161), (48, 73176), (50, 73188),

Gene: Fudan_21 Start: 7145, Stop: 7483, Start Num: 13

Candidate Starts for Fudan_21:

(Start: 12 @7133 has 75 MA's), (Start: 13 @7145 has 2 MA's), (23, 7262), (26, 7319), (29, 7340), (34, 7403), (35, 7409),

Gene: Genie2_106 Start: 72930, Stop: 73376, Start Num: 12

Candidate Starts for Genie2_106:

(Start: 12 @72930 has 75 MA's), (14, 72963), (18, 73011), (24, 73074), (25, 73101), (36, 73212),

Gene: Gibbi_110 Start: 72980, Stop: 73426, Start Num: 12

Candidate Starts for Gibbi_110:

(Start: 12 @72980 has 75 MA's), (24, 73124), (25, 73151), (32, 73238), (36, 73262), (38, 73304),

Gene: HangryHippo_102 Start: 72816, Stop: 73268, Start Num: 12

Candidate Starts for HangryHippo_102:

(Start: 12 @72816 has 75 MA's), (16, 72876), (17, 72879), (25, 72993), (34, 73095),

Gene: IchabodCrane_103 Start: 72569, Stop: 73015, Start Num: 12

Candidate Starts for IchabodCrane_103:

(Start: 12 @72569 has 75 MA's), (24, 72713), (25, 72740), (32, 72827), (36, 72851), (38, 72893),

Gene: Jay2Jay_106 Start: 73654, Stop: 74085, Start Num: 12

Candidate Starts for Jay2Jay_106:

(Start: 12 @73654 has 75 MA's), (17, 73717), (28, 73855), (39, 73975), (42, 73987), (48, 74029), (50, 74041),

Gene: JimJam_106 Start: 72946, Stop: 73392, Start Num: 12

Candidate Starts for JimJam_106:

(Start: 12 @72946 has 75 MA's), (24, 73090), (25, 73117), (32, 73204), (38, 73270),

Gene: Jollison_105 Start: 72825, Stop: 73271, Start Num: 12

Candidate Starts for Jollison_105:

(Start: 12 @72825 has 75 MA's), (24, 72969), (25, 72996), (32, 73083), (36, 73107), (38, 73149),

Gene: Karimac_105 Start: 73077, Stop: 73550, Start Num: 10

Candidate Starts for Karimac_105:

(Start: 7 @73068 has 1 MA's), (Start: 10 @73077 has 1 MA's), (24, 73248), (25, 73275), (32, 73362), (38, 73428),

Gene: KentuckyRacer_106 Start: 72761, Stop: 73207, Start Num: 12

Candidate Starts for KentuckyRacer_106:

(Start: 12 @72761 has 75 MA's), (24, 72905), (25, 72932), (32, 73019), (36, 73043), (38, 73085),

Gene: Larnav_102 Start: 72801, Stop: 73253, Start Num: 12

Candidate Starts for Larnav_102:

(Start: 12 @72801 has 75 MA's), (16, 72861), (17, 72864), (25, 72978), (34, 73080),

Gene: Leo04_103 Start: 73316, Stop: 73768, Start Num: 12

Candidate Starts for Leo04_103:

(Start: 12 @73316 has 75 MA's), (16, 73376), (17, 73379), (25, 73493), (34, 73595),

Gene: Liandry_102 Start: 73161, Stop: 73613, Start Num: 12

Candidate Starts for Liandry_102:

(6, 73128), (Start: 12 @73161 has 75 MA's), (16, 73221), (17, 73224), (25, 73338), (34, 73440),

Gene: LilMartin_101 Start: 71967, Stop: 72476, Start Num: 12

Candidate Starts for LilMartin_101:

(9, 71931), (Start: 12 @71967 has 75 MA's), (17, 72030), (25, 72144), (27, 72174), (30, 72216), (34, 72246), (43, 72324), (45, 72336), (47, 72351), (53, 72411), (54, 72456),

Gene: LuckySocke_20 Start: 7145, Stop: 7483, Start Num: 13

Candidate Starts for LuckySocke_20:

(Start: 12 @7133 has 75 MA's), (Start: 13 @7145 has 2 MA's), (23, 7262), (26, 7319), (29, 7340), (34, 7403), (35, 7409),

Gene: LukeCage_105 Start: 72820, Stop: 73302, Start Num: 8

Candidate Starts for LukeCage_105:

(Start: 8 @72820 has 1 MA's), (24, 73000), (25, 73027), (38, 73180),

Gene: Lululemon_101 Start: 72197, Stop: 72649, Start Num: 12

Candidate Starts for Lululemon_101:

(Start: 12 @72197 has 75 MA's), (16, 72257), (17, 72260), (25, 72374), (34, 72476),

Gene: Marsus_102 Start: 72308, Stop: 72817, Start Num: 12

Candidate Starts for Marsus_102:

(Start: 12 @72308 has 75 MA's), (15, 72356), (17, 72371), (25, 72485), (27, 72515), (30, 72557), (34, 72587), (43, 72665), (45, 72677), (47, 72692), (52, 72737), (54, 72797),

Gene: Mildred21_102 Start: 72145, Stop: 72654, Start Num: 12

Candidate Starts for Mildred21_102:

(Start: 12 @72145 has 75 MA's), (15, 72193), (17, 72208), (25, 72322), (27, 72352), (30, 72394), (34, 72424), (43, 72502), (45, 72514), (47, 72529),

Gene: MindFlayer_103 Start: 72476, Stop: 72922, Start Num: 12

Candidate Starts for MindFlayer_103:

(Start: 12 @72476 has 75 MA's), (24, 72620), (25, 72647), (32, 72734), (36, 72758), (38, 72800),

Gene: Mugiwara_105 Start: 73360, Stop: 73806, Start Num: 12

Candidate Starts for Mugiwara_105:

(2, 73192), (5, 73297), (Start: 10 @73333 has 1 MA's), (Start: 12 @73360 has 75 MA's), (24, 73504), (25, 73531), (38, 73684),

Gene: MulchMansion_101 Start: 71967, Stop: 72476, Start Num: 12

Candidate Starts for MulchMansion_101:

(9, 71931), (Start: 12 @71967 has 75 MA's), (17, 72030), (25, 72144), (27, 72174), (30, 72216), (34, 72246), (43, 72324), (45, 72336), (47, 72351), (53, 72411), (54, 72456),

Gene: Muntaha_87 Start: 66081, Stop: 66506, Start Num: 12

Candidate Starts for Muntaha_87:

(Start: 12 @66081 has 75 MA's), (28, 66285), (33, 66339), (37, 66393), (49, 66465), (51, 66477),

Gene: Navo_100 Start: 72963, Stop: 73415, Start Num: 12

Candidate Starts for Navo_100:

(6, 72930), (Start: 12 @72963 has 75 MA's), (16, 73023), (17, 73026), (25, 73140), (34, 73242), (45, 73332),

Gene: NootNoot_99 Start: 72075, Stop: 72527, Start Num: 12

Candidate Starts for NootNoot_99:

(6, 72042), (Start: 12 @72075 has 75 MA's), (16, 72135), (17, 72138), (25, 72252), (34, 72354),

Gene: PacManQ_101 Start: 72197, Stop: 72649, Start Num: 12

Candidate Starts for PacManQ_101:

(Start: 12 @72197 has 75 MA's), (16, 72257), (17, 72260), (25, 72374), (34, 72476),

Gene: Paradiddles_99 Start: 72224, Stop: 72676, Start Num: 12

Candidate Starts for Paradiddles_99:

(6, 72191), (Start: 12 @72224 has 75 MA's), (16, 72284), (17, 72287), (25, 72401), (34, 72503),

Gene: Peebs_101 Start: 72615, Stop: 73067, Start Num: 12

Candidate Starts for Peebs_101:

(Start: 12 @72615 has 75 MA's), (16, 72675), (17, 72678), (25, 72792), (34, 72894),

Gene: Pepperwood_102 Start: 72748, Stop: 73200, Start Num: 12

Candidate Starts for Pepperwood_102:

(Start: 12 @72748 has 75 MA's), (16, 72808), (17, 72811), (25, 72925), (34, 73027),

Gene: Persimmon_102 Start: 72009, Stop: 72461, Start Num: 12

Candidate Starts for Persimmon_102:

(6, 71976), (Start: 12 @72009 has 75 MA's), (16, 72069), (17, 72072), (25, 72186), (34, 72288), (45, 72378),

Gene: PinkiePie_102 Start: 73161, Stop: 73613, Start Num: 12

Candidate Starts for PinkiePie_102:

(6, 73128), (Start: 12 @73161 has 75 MA's), (16, 73221), (17, 73224), (25, 73338), (34, 73440),

Gene: PumpkinSpice_105 Start: 72868, Stop: 73314, Start Num: 12

Candidate Starts for PumpkinSpice_105:

(Start: 12 @72868 has 75 MA's), (24, 73012), (25, 73039), (32, 73126), (36, 73150), (38, 73192),

Gene: Quarant19_105 Start: 72859, Stop: 73305, Start Num: 12

Candidate Starts for Quarant19_105:

(Start: 12 @72859 has 75 MA's), (24, 73003), (25, 73030), (32, 73117), (36, 73141), (38, 73183),

Gene: Rikishi_105 Start: 72774, Stop: 73220, Start Num: 12

Candidate Starts for Rikishi_105:

(Start: 12 @72774 has 75 MA's), (24, 72918), (25, 72945), (32, 73032), (36, 73056), (38, 73098),

Gene: SaltySpitoon_105 Start: 72871, Stop: 73317, Start Num: 12

Candidate Starts for SaltySpitoon_105:

(Start: 12 @72871 has 75 MA's), (24, 73015), (25, 73042), (32, 73129), (36, 73153), (38, 73195),

Gene: Samisti12_102 Start: 73993, Stop: 74445, Start Num: 12

Candidate Starts for Samisti12_102:

(Start: 12 @73993 has 75 MA's), (16, 74053), (17, 74056), (25, 74170), (34, 74272),

Gene: Scheme_103 Start: 73398, Stop: 73850, Start Num: 12

Candidate Starts for Scheme_103:

(Start: 12 @73398 has 75 MA's), (16, 73458), (17, 73461), (25, 73575), (34, 73677),

Gene: Shuckle_100 Start: 72997, Stop: 73449, Start Num: 12

Candidate Starts for Shuckle_100:

(Start: 12 @72997 has 75 MA's), (16, 73057), (17, 73060), (25, 73174), (34, 73276),

Gene: Sollertia_106 Start: 72930, Stop: 73376, Start Num: 12

Candidate Starts for Sollertia_106:

(Start: 12 @72930 has 75 MA's), (14, 72963), (18, 73011), (24, 73074), (25, 73101), (36, 73212),

Gene: Spelly_106 Start: 72823, Stop: 73269, Start Num: 12

Candidate Starts for Spelly_106:

(Start: 12 @72823 has 75 MA's), (24, 72967), (25, 72994), (32, 73081), (36, 73105), (38, 73147),

Gene: Spilled_107 Start: 72940, Stop: 73386, Start Num: 12

Candidate Starts for Spilled_107:

(Start: 12 @72940 has 75 MA's), (24, 73084), (25, 73111), (32, 73198), (36, 73222), (38, 73264),

Gene: Squillium_103 Start: 73162, Stop: 73614, Start Num: 12

Candidate Starts for Squillium_103:

(6, 73129), (Start: 12 @73162 has 75 MA's), (16, 73222), (17, 73225), (25, 73339), (34, 73441),

Gene: Stanimal_106 Start: 72819, Stop: 73265, Start Num: 12

Candidate Starts for Stanimal_106:

(Start: 12 @72819 has 75 MA's), (14, 72852), (18, 72900), (24, 72963), (25, 72990), (36, 73101),

Gene: Starbow_104 Start: 72844, Stop: 73290, Start Num: 12

Candidate Starts for Starbow_104:

(Start: 12 @72844 has 75 MA's), (24, 72988), (25, 73015), (32, 73102), (36, 73126), (38, 73168),

Gene: Sushi23_101 Start: 72973, Stop: 73425, Start Num: 12

Candidate Starts for Sushi23_101:

(Start: 12 @72973 has 75 MA's), (16, 73033), (17, 73036), (25, 73150), (34, 73252),

Gene: Targaryen_102 Start: 73703, Stop: 74134, Start Num: 12

Candidate Starts for Targaryen_102:

(Start: 12 @73703 has 75 MA's), (17, 73766), (28, 73904), (39, 74024), (42, 74036), (48, 74078), (50, 74090),

Gene: Deutsch_102 Start: 73172, Stop: 73624, Start Num: 12

Candidate Starts for Deutsch_102:

(Start: 12 @73172 has 75 MA's), (16, 73232), (17, 73235), (25, 73349), (34, 73451),

Gene: TomSawyer_104 Start: 72462, Stop: 72908, Start Num: 12

Candidate Starts for TomSawyer_104:

(Start: 12 @72462 has 75 MA's), (24, 72606), (25, 72633), (32, 72720), (36, 72744), (38, 72786),

Gene: Tomas_107 Start: 74941, Stop: 75384, Start Num: 12

Candidate Starts for Tomas_107:

(Start: 12 @74941 has 75 MA's), (16, 75001), (17, 75004), (22, 75067), (25, 75118), (28, 75151), (30, 75190), (34, 75220),

Gene: Tribute_101 Start: 72859, Stop: 73311, Start Num: 12

Candidate Starts for Tribute_101:

(Start: 12 @72859 has 75 MA's), (16, 72919), (17, 72922), (25, 73036), (34, 73138),

Gene: Wakanda_85 Start: 65673, Stop: 66098, Start Num: 12

Candidate Starts for Wakanda_85:

(Start: 12 @65673 has 75 MA's), (28, 65877), (33, 65931), (37, 65985), (49, 66057), (51, 66069),

Gene: Warpy_105 Start: 73167, Stop: 73598, Start Num: 12

Candidate Starts for Warpy_105:

(Start: 12 @73167 has 75 MA's), (17, 73230), (28, 73368), (39, 73488), (42, 73500), (48, 73542), (50, 73554),

Gene: Watermoore_101 Start: 73388, Stop: 73840, Start Num: 12

Candidate Starts for Watermoore_101:

(Start: 12 @73388 has 75 MA's), (16, 73448), (17, 73451), (25, 73565), (34, 73667),

Gene: WhereRU_99 Start: 72355, Stop: 72807, Start Num: 12

Candidate Starts for WhereRU_99:

(6, 72322), (Start: 12 @72355 has 75 MA's), (16, 72415), (17, 72418), (25, 72532), (34, 72634), (45, 72724),

Gene: Wipeout_103 Start: 73213, Stop: 73659, Start Num: 12

Candidate Starts for Wipeout_103:

(Start: 12 @73213 has 75 MA's), (24, 73357), (25, 73384), (32, 73471), (36, 73495), (38, 73537),

Gene: Yaboi_106 Start: 72907, Stop: 73353, Start Num: 12

Candidate Starts for Yaboi_106:

(Start: 12 @72907 has 75 MA's), (14, 72940), (18, 72988), (24, 73051), (25, 73078), (36, 73189),