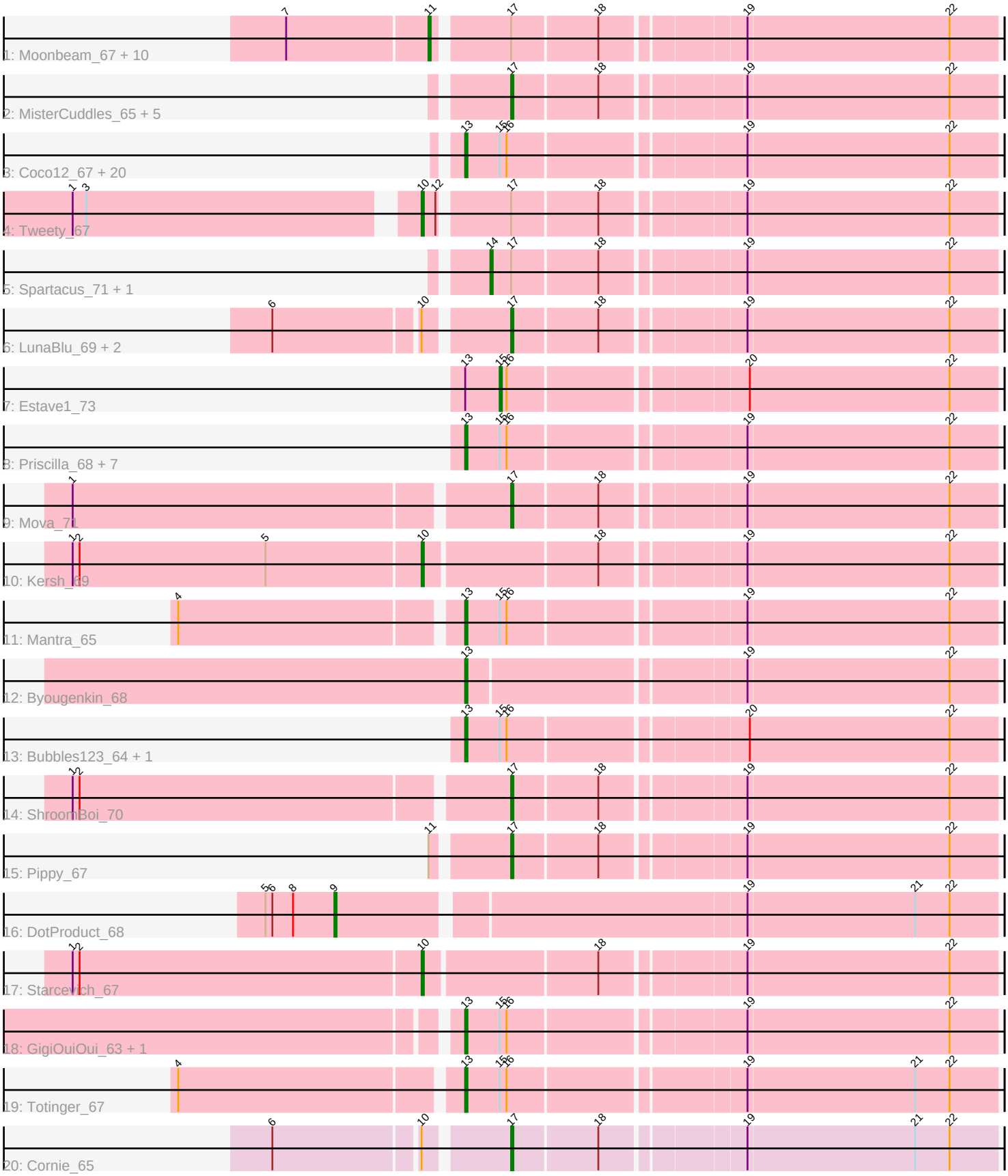
Pham 347593


1: Moonbeam_67 + 10
2: MisterCuddles_65 + 5
3: Coco12_67 + 20
4: Tweety_67
5: Spartacus_71 + 1
6: LunaBlu_69 + 2
7: Estave1_73
8: Priscilla_68 + 7
9: Mova_71
10: Kersh_69
11: Mantra_65
12: Byougenkin_68
13: Bubbles123_64 + 1
14: ShroomBoi_70
15: Pippy_67
16: DotProduct_68
17: Starcevich_67
18: GigiOuiOui_63 + 1
19: Totinger_67
20: Cornie_65

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 347593 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347593 has 67 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Moonbeam_67, Emma_70, ByChance_61, Crumble_63, Fancypants_71, ShowerHandel_71, Zizzle_72, BobaPhett_72, Jennelsea_66, Burwell21_66, Whouxphf_65
• Track 2 : MisterCuddles_65, Ruby_63, Alexphander_71, Girr_65, LilMoolah_66, Nivrat_64
• Track 3 : Coco12_67, Saal_69, Doug_69, Brookers_65, Cerasum_64, LastJedi_61, BigPhil_64, Kingsley_65, James_71, Mattes_71, Gorge_71, Clifton_62, Sarma624_66, Brocalys_62, DosHalletts_69, Velveteen_63, OlympiaSaint_69, GUmbie_65, RockyHorror_68, Lizziana_73, Rita_74
• Track 4 : Tweety_67
• Track 5 : Spartacus_71, Violac_68
• Track 6 : LunaBlu_69, Zerg_67, Galactic_66
• Track 7 : Estave1_73
• Track 8 : Priscilla_68, Koella_62, Cabrinians_69, SwagPigglett_73, MinionDave_67, Spikelee_75, CaptainTrips_66, Aubs_68
• Track 9 : Mova_71
• Track 10 : Kersh_69
• Track 11 : Mantra_65
• Track 12 : Byougenkin_68
• Track 13 : Bubbles123_64, Jarcob_67
• Track 14 : ShroomBoi_70
• Track 15 : Pippy_67
• Track 16 : DotProduct_68
• Track 17 : Starcevich_67
• Track 18 : GigiOuiOui_63, Pacc40_61
• Track 19 : Totinger_67
• Track 20 : Cornie_65

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

The start number called the most often in the published annotations is 13, it was called in 36 of the 67 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aubs_68, BigPhil_64, Brocalys_62, Brookers_65, Bubbles123_64, Byougenkin_68, Cabrinians_69, CaptainTrips_66, Cerasum_64, Clifton_62, Coco12_67, DosHalletts_69, Doug_69, GUmbie_65, GigiOuiOui_63, Gorge_71, James_71, Jarcob_67, Kingsley_65, Koella_62, LastJedi_61, Lizziana_73, Mantra_65, Mattes_71, MinionDave_67, OlympiaSaint_69, Pacc40_61, Priscilla_68, Rita_74, RockyHorror_68, Saal_69, Sarma624_66, Spikelee_75, SwagPigglett_73, Totinger_67, Velveteen_63,

Genes that have the "Most Annotated" start but do not call it:
• Estave1_73,

Genes that do not have the "Most Annotated" start:
• Alexphander_71, BobaPhett_72, Burwell21_66, ByChance_61, Cornie_65, Crumble_63, DotProduct_68, Emma_70, Fancypants_71, Galactic_66, Girr_65, Jennelsea_66, Kersh_69, LilMoolah_66, LunaBlu_69, MisterCuddles_65, Moonbeam_67, Mova_71, Nivrat_64, Pippy_67, Ruby_63, ShowerHandel_71, ShroomBoi_70, Spartacus_71, Starcevich_67, Tweety_67, Violac_68, Whouxphf_65, Zerg_67, Zizzle_72,

Summary by start number:

Start 9:
• Found in 1 of 67 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DotProduct_68 (F1),

Start 10:
• Found in 7 of 67 (10.4%) of genes in pham
• Manual Annotations of this start: 3 of 67
• Called 42.9% of time when present
• Phage (with cluster) where this start called: Kersh_69 (F1), Starcevich_67 (F1), Tweety_67 (F1),

Start 11:
• Found in 12 of 67 (17.9%) of genes in pham
• Manual Annotations of this start: 11 of 67
• Called 91.7% of time when present
• Phage (with cluster) where this start called: BobaPhett_72 (F1), Burwell21_66 (F1), ByChance_61 (F1), Crumble_63 (F1), Emma_70 (F1), Fancypants_71 (F1), Jennelsea_66 (F1), Moonbeam_67 (F1), ShowerHandel_71 (F1), Whouxphf_65 (F1), Zizzle_72 (F1),

Start 13:
• Found in 37 of 67 (55.2%) of genes in pham
• Manual Annotations of this start: 36 of 67
• Called 97.3% of time when present
• Phage (with cluster) where this start called: Aubs_68 (F1), BigPhil_64 (F1), Brocalys_62 (F1), Brookers_65 (F1), Bubbles123_64 (F1), Byougenkin_68 (F1), Cabrinians_69 (F1), CaptainTrips_66 (F1), Cerasum_64 (F1), Clifton_62 (F1), Coco12_67 (F1), DosHalletts_69 (F1), Doug_69 (F1), GUmbie_65 (F1), GigiOuiOui_63 (F1), Gorge_71 (F1), James_71 (F1), Jarcob_67 (F1), Kingsley_65 (F1), Koella_62 (F1), LastJedi_61 (F1), Lizziana_73 (F1), Mantra_65 (F1), Mattes_71

(F1), MinionDave_67 (F1), OlympiaSaint_69 (F1), Pacc40_61 (F1), Priscilla_68 (F1), Rita_74 (F1), RockyHorror_68 (F1), Saal_69 (F1), Sarma624_66 (F1), Spikelee_75 (F1), SwagPigglett_73 (F1), Totinger_67 (F1), Velveteen_63 (F1),

Start 14:
• Found in 2 of 67 (3.0%) of genes in pham
• Manual Annotations of this start: 2 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Spartacus_71 (F1), Violac_68 (F1),

Start 15:
• Found in 36 of 67 (53.7%) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 2.8% of time when present
• Phage (with cluster) where this start called: Estave1_73 (F1),

Start 17:
• Found in 27 of 67 (40.3%) of genes in pham
• Manual Annotations of this start: 13 of 67
• Called 48.1% of time when present
• Phage (with cluster) where this start called: Alexphander_71 (F1), Cornie_65 (F5), Galactic_66 (F1), Girr_65 (F1), LilMoolah_66 (F1), LunaBlu_69 (F1), MisterCuddles_65 (F1), Mova_71 (F1), Nivrat_64 (F1), Pippy_67 (F1), Ruby_63 (F1), ShroomBoi_70 (F1), Zerg_67 (F1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, F5,

Info for manual annotations of cluster F1:
•Start number 9 was manually annotated 1 time for cluster F1.
•Start number 10 was manually annotated 3 times for cluster F1.
•Start number 11 was manually annotated 11 times for cluster F1.
•Start number 13 was manually annotated 36 times for cluster F1.
•Start number 14 was manually annotated 2 times for cluster F1.
•Start number 15 was manually annotated 1 time for cluster F1.
•Start number 17 was manually annotated 12 times for cluster F1.

Info for manual annotations of cluster F5:
•Start number 17 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Alexphander_71 Start: 45177, Stop: 45377, Start Num: 17
Candidate Starts for Alexphander_71:
(Start: 17 @45177 has 13 MA's), (18, 45213), (19, 45270), (22, 45357),

Gene: Aubs_68 Start: 45292, Stop: 45513, Start Num: 13
Candidate Starts for Aubs_68:
(Start: 13 @45292 has 36 MA's), (Start: 15 @45307 has 1 MA's), (16, 45310), (19, 45406), (22, 45493),

Gene: BigPhil_64 Start: 42023, Stop: 42244, Start Num: 13
Candidate Starts for BigPhil_64:
(Start: 13 @42023 has 36 MA's), (Start: 15 @42038 has 1 MA's), (16, 42041), (19, 42137), (22, 42224),

Gene: BobaPhett_72 Start: 47714, Stop: 47944, Start Num: 11
Candidate Starts for BobaPhett_72:
(7, 47654), (Start: 11 @47714 has 11 MA's), (Start: 17 @47744 has 13 MA's), (18, 47780), (19, 47837), (22, 47924),

Gene: Brocalys_62 Start: 43203, Stop: 43424, Start Num: 13
Candidate Starts for Brocalys_62:
(Start: 13 @43203 has 36 MA's), (Start: 15 @43218 has 1 MA's), (16, 43221), (19, 43317), (22, 43404),

Gene: Brookers_65 Start: 44974, Stop: 45195, Start Num: 13
Candidate Starts for Brookers_65:
(Start: 13 @44974 has 36 MA's), (Start: 15 @44989 has 1 MA's), (16, 44992), (19, 45088), (22, 45175),

Gene: Bubbles123_64 Start: 44481, Stop: 44702, Start Num: 13
Candidate Starts for Bubbles123_64:
(Start: 13 @44481 has 36 MA's), (Start: 15 @44496 has 1 MA's), (16, 44499), (20, 44595), (22, 44682),

Gene: Burwell21_66 Start: 45036, Stop: 45266, Start Num: 11
Candidate Starts for Burwell21_66:
(7, 44976), (Start: 11 @45036 has 11 MA's), (Start: 17 @45066 has 13 MA's), (18, 45102), (19, 45159), (22, 45246),

Gene: ByChance_61 Start: 41056, Stop: 41289, Start Num: 11
Candidate Starts for ByChance_61:
(7, 40996), (Start: 11 @41056 has 11 MA's), (Start: 17 @41086 has 13 MA's), (18, 41122), (19, 41179), (22, 41266),

Gene: Byougenkin_68 Start: 43105, Stop: 43326, Start Num: 13
Candidate Starts for Byougenkin_68:
(Start: 13 @43105 has 36 MA's), (19, 43219), (22, 43306),

Gene: Cabrinians_69 Start: 45124, Stop: 45345, Start Num: 13
Candidate Starts for Cabrinians_69:
(Start: 13 @45124 has 36 MA's), (Start: 15 @45139 has 1 MA's), (16, 45142), (19, 45238), (22, 45325),

Gene: CaptainTrips_66 Start: 44859, Stop: 45080, Start Num: 13
Candidate Starts for CaptainTrips_66:
(Start: 13 @44859 has 36 MA's), (Start: 15 @44874 has 1 MA's), (16, 44877), (19, 44973), (22, 45060),

Gene: Cerasum_64 Start: 42041, Stop: 42262, Start Num: 13
Candidate Starts for Cerasum_64:
(Start: 13 @42041 has 36 MA's), (Start: 15 @42056 has 1 MA's), (16, 42059), (19, 42155), (22, 42242),

Gene: Clifton_62 Start: 43554, Stop: 43775, Start Num: 13
Candidate Starts for Clifton_62:
(Start: 13 @43554 has 36 MA's), (Start: 15 @43569 has 1 MA's), (16, 43572), (19, 43668), (22, 43755),

Gene: Coco12_67 Start: 46098, Stop: 46319, Start Num: 13
Candidate Starts for Coco12_67:

(Start: 13 @46098 has 36 MA's), (Start: 15 @46113 has 1 MA's), (16, 46116), (19, 46212), (22, 46299),

Gene: Cornie_65 Start: 43837, Stop: 44037, Start Num: 17
Candidate Starts for Cornie_65:
(6, 43744), (Start: 10 @43804 has 3 MA's), (Start: 17 @43837 has 13 MA's), (18, 43873), (19, 43930), (21, 44002), (22, 44017),

Gene: Crumble_63 Start: 41011, Stop: 41244, Start Num: 11
Candidate Starts for Crumble_63:
(7, 40951), (Start: 11 @41011 has 11 MA's), (Start: 17 @41041 has 13 MA's), (18, 41077), (19, 41134), (22, 41221),

Gene: DosHalletts_69 Start: 46178, Stop: 46399, Start Num: 13
Candidate Starts for DosHalletts_69:
(Start: 13 @46178 has 36 MA's), (Start: 15 @46193 has 1 MA's), (16, 46196), (19, 46292), (22, 46379),

Gene: DotProduct_68 Start: 44633, Stop: 44908, Start Num: 9
Candidate Starts for DotProduct_68:
(5, 44603), (6, 44606), (8, 44615), (Start: 9 @44633 has 1 MA's), (19, 44801), (21, 44873), (22, 44888),

Gene: Doug_69 Start: 46503, Stop: 46724, Start Num: 13
Candidate Starts for Doug_69:
(Start: 13 @46503 has 36 MA's), (Start: 15 @46518 has 1 MA's), (16, 46521), (19, 46617), (22, 46704),

Gene: Emma_70 Start: 44637, Stop: 44867, Start Num: 11
Candidate Starts for Emma_70:
(7, 44577), (Start: 11 @44637 has 11 MA's), (Start: 17 @44667 has 13 MA's), (18, 44703), (19, 44760), (22, 44847),

Gene: Estave1_73 Start: 47498, Stop: 47704, Start Num: 15
Candidate Starts for Estave1_73:
(Start: 13 @47483 has 36 MA's), (Start: 15 @47498 has 1 MA's), (16, 47501), (20, 47597), (22, 47684),

Gene: Fancypants_71 Start: 45649, Stop: 45879, Start Num: 11
Candidate Starts for Fancypants_71:
(7, 45589), (Start: 11 @45649 has 11 MA's), (Start: 17 @45679 has 13 MA's), (18, 45715), (19, 45772), (22, 45859),

Gene: GUmbie_65 Start: 44551, Stop: 44772, Start Num: 13
Candidate Starts for GUmbie_65:
(Start: 13 @44551 has 36 MA's), (Start: 15 @44566 has 1 MA's), (16, 44569), (19, 44665), (22, 44752),

Gene: Galactic_66 Start: 44728, Stop: 44928, Start Num: 17
Candidate Starts for Galactic_66:
(6, 44635), (Start: 10 @44695 has 3 MA's), (Start: 17 @44728 has 13 MA's), (18, 44764), (19, 44821), (22, 44908),

Gene: GigiOuiOui_63 Start: 43697, Stop: 43918, Start Num: 13
Candidate Starts for GigiOuiOui_63:
(Start: 13 @43697 has 36 MA's), (Start: 15 @43712 has 1 MA's), (16, 43715), (19, 43811), (22, 43898),

Gene: Girr_65 Start: 44587, Stop: 44787, Start Num: 17
Candidate Starts for Girr_65:

(Start: 17 @44587 has 13 MA's), (18, 44623), (19, 44680), (22, 44767),

Gene: Gorge_71 Start: 46493, Stop: 46714, Start Num: 13
Candidate Starts for Gorge_71:
(Start: 13 @46493 has 36 MA's), (Start: 15 @46508 has 1 MA's), (16, 46511), (19, 46607), (22, 46694),

Gene: James_71 Start: 46618, Stop: 46839, Start Num: 13
Candidate Starts for James_71:
(Start: 13 @46618 has 36 MA's), (Start: 15 @46633 has 1 MA's), (16, 46636), (19, 46732), (22, 46819),

Gene: Jarcob_67 Start: 45048, Stop: 45269, Start Num: 13
Candidate Starts for Jarcob_67:
(Start: 13 @45048 has 36 MA's), (Start: 15 @45063 has 1 MA's), (16, 45066), (20, 45162), (22, 45249),

Gene: Jennelsea_66 Start: 43764, Stop: 43997, Start Num: 11
Candidate Starts for Jennelsea_66:
(7, 43704), (Start: 11 @43764 has 11 MA's), (Start: 17 @43794 has 13 MA's), (18, 43830), (19, 43887), (22, 43974),

Gene: Kersh_69 Start: 47054, Stop: 47290, Start Num: 10
Candidate Starts for Kersh_69:
(1, 46904), (2, 46907), (5, 46988), (Start: 10 @47054 has 3 MA's), (18, 47126), (19, 47183), (22, 47270),

Gene: Kingsley_65 Start: 44831, Stop: 45052, Start Num: 13
Candidate Starts for Kingsley_65:
(Start: 13 @44831 has 36 MA's), (Start: 15 @44846 has 1 MA's), (16, 44849), (19, 44945), (22, 45032),

Gene: Koella_62 Start: 41022, Stop: 41243, Start Num: 13
Candidate Starts for Koella_62:
(Start: 13 @41022 has 36 MA's), (Start: 15 @41037 has 1 MA's), (16, 41040), (19, 41136), (22, 41223),

Gene: LastJedi_61 Start: 43597, Stop: 43818, Start Num: 13
Candidate Starts for LastJedi_61:
(Start: 13 @43597 has 36 MA's), (Start: 15 @43612 has 1 MA's), (16, 43615), (19, 43711), (22, 43798),

Gene: LilMoolah_66 Start: 45244, Stop: 45444, Start Num: 17
Candidate Starts for LilMoolah_66:
(Start: 17 @45244 has 13 MA's), (18, 45280), (19, 45337), (22, 45424),

Gene: Lizziana_73 Start: 46099, Stop: 46320, Start Num: 13
Candidate Starts for Lizziana_73:
(Start: 13 @46099 has 36 MA's), (Start: 15 @46114 has 1 MA's), (16, 46117), (19, 46213), (22, 46300),

Gene: LunaBlu_69 Start: 45387, Stop: 45587, Start Num: 17
Candidate Starts for LunaBlu_69:
(6, 45294), (Start: 10 @45354 has 3 MA's), (Start: 17 @45387 has 13 MA's), (18, 45423), (19, 45480), (22, 45567),

Gene: Mantra_65 Start: 44857, Stop: 45078, Start Num: 13
Candidate Starts for Mantra_65:
(4, 44740), (Start: 13 @44857 has 36 MA's), (Start: 15 @44872 has 1 MA's), (16, 44875), (19, 44971), (22, 45058),

Gene: Mattes_71 Start: 46618, Stop: 46839, Start Num: 13
Candidate Starts for Mattes_71:
(Start: 13 @46618 has 36 MA's), (Start: 15 @46633 has 1 MA's), (16, 46636), (19, 46732), (22, 46819),

Gene: MinionDave_67 Start: 45395, Stop: 45616, Start Num: 13
Candidate Starts for MinionDave_67:
(Start: 13 @45395 has 36 MA's), (Start: 15 @45410 has 1 MA's), (16, 45413), (19, 45509), (22, 45596),

Gene: MisterCuddles_65 Start: 44587, Stop: 44787, Start Num: 17
Candidate Starts for MisterCuddles_65:
(Start: 17 @44587 has 13 MA's), (18, 44623), (19, 44680), (22, 44767),

Gene: Moonbeam_67 Start: 44566, Stop: 44796, Start Num: 11
Candidate Starts for Moonbeam_67:
(7, 44506), (Start: 11 @44566 has 11 MA's), (Start: 17 @44596 has 13 MA's), (18, 44632), (19, 44689), (22, 44776),

Gene: Mova_71 Start: 44506, Stop: 44706, Start Num: 17
Candidate Starts for Mova_71:
(1, 44323), (Start: 17 @44506 has 13 MA's), (18, 44542), (19, 44599), (22, 44686),

Gene: Nivrat_64 Start: 45117, Stop: 45317, Start Num: 17
Candidate Starts for Nivrat_64:
(Start: 17 @45117 has 13 MA's), (18, 45153), (19, 45210), (22, 45297),

Gene: OlympiaSaint_69 Start: 45560, Stop: 45781, Start Num: 13
Candidate Starts for OlympiaSaint_69:
(Start: 13 @45560 has 36 MA's), (Start: 15 @45575 has 1 MA's), (16, 45578), (19, 45674), (22, 45761),

Gene: Pacc40_61 Start: 45123, Stop: 45344, Start Num: 13
Candidate Starts for Pacc40_61:
(Start: 13 @45123 has 36 MA's), (Start: 15 @45138 has 1 MA's), (16, 45141), (19, 45237), (22, 45324),

Gene: Pippy_67 Start: 44354, Stop: 44554, Start Num: 17
Candidate Starts for Pippy_67:
(Start: 11 @44324 has 11 MA's), (Start: 17 @44354 has 13 MA's), (18, 44390), (19, 44447), (22, 44534),

Gene: Priscilla_68 Start: 45134, Stop: 45355, Start Num: 13
Candidate Starts for Priscilla_68:
(Start: 13 @45134 has 36 MA's), (Start: 15 @45149 has 1 MA's), (16, 45152), (19, 45248), (22, 45335),

Gene: Rita_74 Start: 45986, Stop: 46207, Start Num: 13
Candidate Starts for Rita_74:
(Start: 13 @45986 has 36 MA's), (Start: 15 @46001 has 1 MA's), (16, 46004), (19, 46100), (22, 46187),

Gene: RockyHorror_68 Start: 44439, Stop: 44660, Start Num: 13
Candidate Starts for RockyHorror_68:
(Start: 13 @44439 has 36 MA's), (Start: 15 @44454 has 1 MA's), (16, 44457), (19, 44553), (22, 44640),

Gene: Ruby_63 Start: 44588, Stop: 44788, Start Num: 17
Candidate Starts for Ruby_63:

(Start: 17 @44588 has 13 MA's), (18, 44624), (19, 44681), (22, 44768),

Gene: Saal_69 Start: 46312, Stop: 46533, Start Num: 13
Candidate Starts for Saal_69:
(Start: 13 @46312 has 36 MA's), (Start: 15 @46327 has 1 MA's), (16, 46330), (19, 46426), (22, 46513),

Gene: Sarma624_66 Start: 42023, Stop: 42244, Start Num: 13
Candidate Starts for Sarma624_66:
(Start: 13 @42023 has 36 MA's), (Start: 15 @42038 has 1 MA's), (16, 42041), (19, 42137), (22, 42224),

Gene: ShowerHandel_71 Start: 44996, Stop: 45229, Start Num: 11
Candidate Starts for ShowerHandel_71:
(7, 44936), (Start: 11 @44996 has 11 MA's), (Start: 17 @45026 has 13 MA's), (18, 45062), (19, 45119), (22, 45206),

Gene: ShroomBoi_70 Start: 45075, Stop: 45275, Start Num: 17
Candidate Starts for ShroomBoi_70:
(1, 44892), (2, 44895), (Start: 17 @45075 has 13 MA's), (18, 45111), (19, 45168), (22, 45255),

Gene: Spartacus_71 Start: 46163, Stop: 46372, Start Num: 14
Candidate Starts for Spartacus_71:
(Start: 14 @46163 has 2 MA's), (Start: 17 @46172 has 13 MA's), (18, 46208), (19, 46265), (22, 46352),

Gene: Spikelee_75 Start: 46711, Stop: 46932, Start Num: 13
Candidate Starts for Spikelee_75:
(Start: 13 @46711 has 36 MA's), (Start: 15 @46726 has 1 MA's), (16, 46729), (19, 46825), (22, 46912),

Gene: Starcevich_67 Start: 45325, Stop: 45561, Start Num: 10
Candidate Starts for Starcevich_67:
(1, 45175), (2, 45178), (Start: 10 @45325 has 3 MA's), (18, 45397), (19, 45454), (22, 45541),

Gene: SwagPigglett_73 Start: 47353, Stop: 47574, Start Num: 13
Candidate Starts for SwagPigglett_73:
(Start: 13 @47353 has 36 MA's), (Start: 15 @47368 has 1 MA's), (16, 47371), (19, 47467), (22, 47554),

Gene: Totinger_67 Start: 44193, Stop: 44414, Start Num: 13
Candidate Starts for Totinger_67:
(4, 44076), (Start: 13 @44193 has 36 MA's), (Start: 15 @44208 has 1 MA's), (16, 44211), (19, 44307), (21, 44379), (22, 44394),

Gene: Tweety_67 Start: 44108, Stop: 44341, Start Num: 10
Candidate Starts for Tweety_67:
(1, 43967), (3, 43973), (Start: 10 @44108 has 3 MA's), (12, 44114), (Start: 17 @44141 has 13 MA's), (18, 44177), (19, 44234), (22, 44321),

Gene: Velveteen_63 Start: 42023, Stop: 42244, Start Num: 13
Candidate Starts for Velveteen_63:
(Start: 13 @42023 has 36 MA's), (Start: 15 @42038 has 1 MA's), (16, 42041), (19, 42137), (22, 42224),

Gene: Violac_68 Start: 45814, Stop: 46023, Start Num: 14
Candidate Starts for Violac_68:
(Start: 14 @45814 has 2 MA's), (Start: 17 @45823 has 13 MA's), (18, 45859), (19, 45916), (22, 46003),

Gene: Whouxphf_65 Start: 44903, Stop: 45133, Start Num: 11
Candidate Starts for Whouxphf_65:
(7, 44843), (Start: 11 @44903 has 11 MA's), (Start: 17 @44933 has 13 MA's), (18, 44969), (19, 45026), (22, 45113),

Gene: Zerg_67 Start: 44571, Stop: 44771, Start Num: 17
Candidate Starts for Zerg_67:
(6, 44478), (Start: 10 @44538 has 3 MA's), (Start: 17 @44571 has 13 MA's), (18, 44607), (19, 44664), (22, 44751),

Gene: Zizzle_72 Start: 46629, Stop: 46862, Start Num: 11
Candidate Starts for Zizzle_72:
(7, 46569), (Start: 11 @46629 has 11 MA's), (Start: 17 @46659 has 13 MA's), (18, 46695), (19, 46752), (22, 46839),