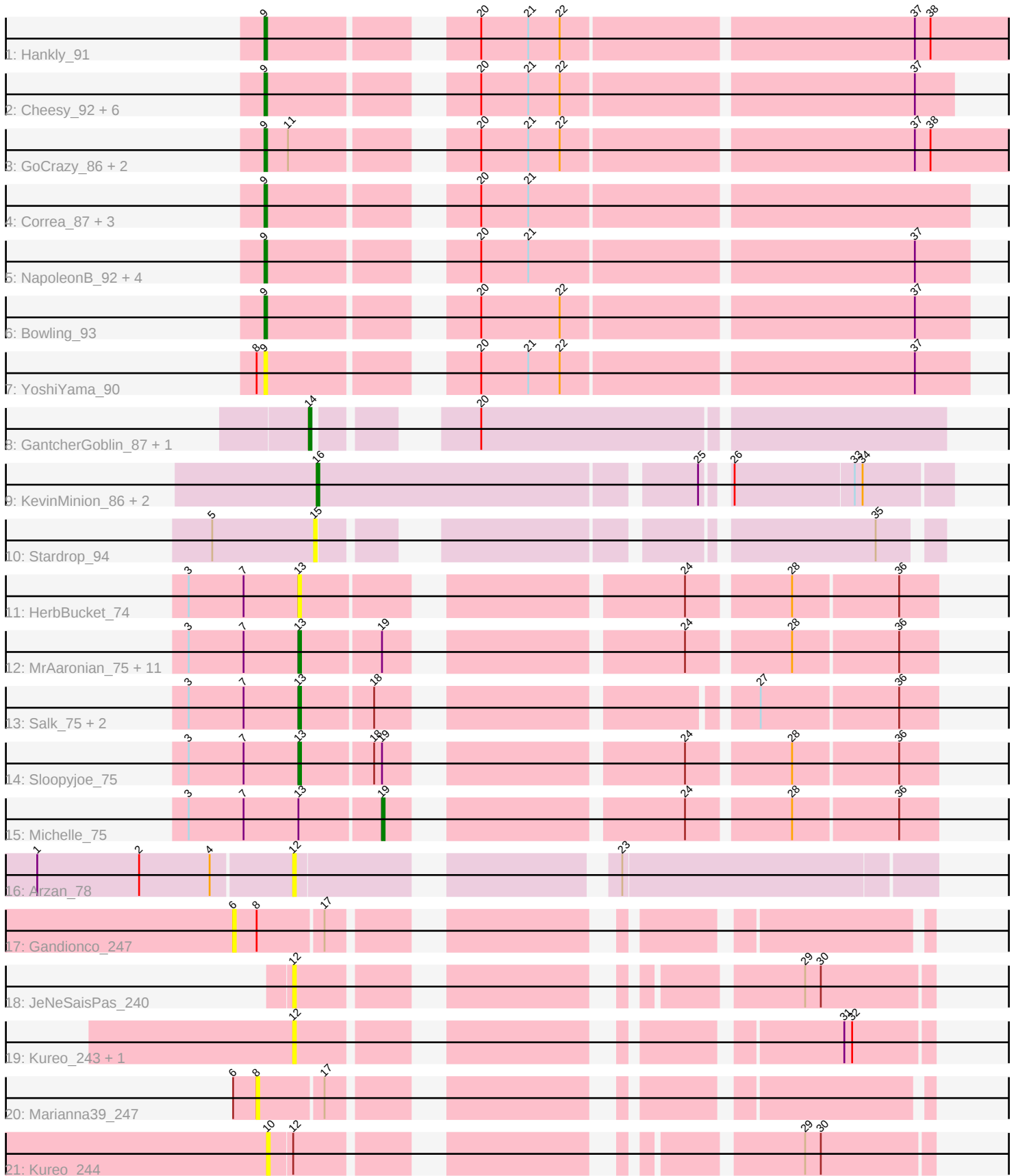


Pham 280521



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 280521 Report

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

Pham number 280521 has 53 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Hankly_91
- Track 2 : Cheesy_92, JEGGS_90, Heisenberger_90, Kardesai_90, Mooshroom_91, Benllo_90, Tribby_93
- Track 3 : GoCrazy_86, Circum_91, KeaneyLin_88
- Track 4 : Correa_87, Elsa_89, Arcadia_89, Nason_89
- Track 5 : NapoleonB_92, BenitoAntonio_89, Dynamite_91, Xenomorph_86, Mudcat_86
- Track 6 : Bowling_93
- Track 7 : YoshiYama_90
- Track 8 : GantcherGoblin_87, Tenney120_89
- Track 9 : KevinMinion_86, Argan_88, Uzumaki_88
- Track 10 : Stardrop_94
- Track 11 : HerbBucket_74
- Track 12 : MrAaronian_75, DoctorPepper_74, Djungelskog_74, Spain_75, Egad_75, Stayer_75, Raunak_76, StarLord_75, BronxBay_75, Shiba_74, Jeremy4pt0_72, ProfFrink_75
- Track 13 : Salk_75, Linda_75, Boog_74
- Track 14 : Sloopyjoe_75
- Track 15 : Michelle_75
- Track 16 : Arzan_78
- Track 17 : Gandionco_247
- Track 18 : JeNeSaisPas_240
- Track 19 : Kureo_243, JeNeSaisPas_239
- Track 20 : Marianna39_247
- Track 21 : Kureo_244

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 20 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia_89, BenitoAntonio_89, Benllo_90, Bowling_93, Cheesy_92, Circum_91, Correa_87, Dynamite_91, Elsa_89, GoCrazy_86, Hankly_91, Heisenberger_90,

JEGGS_90, Kardesai_90, KeaneyLin_88, Mooshroom_91, Mudcat_86, NapoleonB_92, Nason_89, Tribby_93, Xenomorph_86, YoshiYama_90,

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

-

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

- Argan_88, Arzan_78, Boog_74, BronxBay_75, Djungelskog_74, DoctorPepper_74, Egad_75, Gandionco_247, GantcherGoblin_87, HerbBucket_74, JeNeSaisPas_239, JeNeSaisPas_240, Jeremy4pt0_72, KevinMinion_86, Kureo_243, Kureo_244, Linda_75, Marianna39_247, Michelle_75, MrAaronian_75, ProfFrink_75, Raunak_76, Salk_75, Shiba_74, Sloopyjoe_75, Spain_75, StarLord_75, Stardrop_94, Stayer_75, Tenney120_89, Uzumaki_88,

Summary by start number:

Start 6:

- Found in 2 of 53 (3.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gandionco_247 (FK),

Start 8:

- Found in 3 of 53 (5.7%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Marianna39_247 (FK),

Start 9:

- Found in 22 of 53 (41.5%) of genes in pham
- Manual Annotations of this start: 20 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia_89 (AM), BenitoAntonio_89 (AM), Benllo_90 (AM), Bowling_93 (AM), Cheesy_92 (AM), Circum_91 (AM), Correa_87 (AM), Dynamite_91 (AM), Elsa_89 (AM), GoCrazy_86 (AM), Hankly_91 (AM), Heisenberger_90 (AM), JEGGS_90 (AM), Kardesai_90 (AM), KeaneyLin_88 (AM), Mooshroom_91 (AM), Mudcat_86 (AM), NapoleonB_92 (AM), Nason_89 (AM), Tribby_93 (AM), Xenomorph_86 (AM), YoshiYama_90 (AM),

Start 10:

- Found in 1 of 53 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kureo_244 (FK),

Start 12:

- Found in 5 of 53 (9.4%) of genes in pham
- No Manual Annotations of this start.
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Arzan_78 (FI), JeNeSaisPas_239 (FK), JeNeSaisPas_240 (FK), Kureo_243 (FK),

Start 13:

- Found in 18 of 53 (34.0%) of genes in pham
- Manual Annotations of this start: 13 of 39
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Boog_74 (AW), BronxBay_75 (AW), Djungelskog_74 (AW), DoctorPepper_74 (AW), Egad_75 (AW), HerbBucket_74 (AW), Jeremy4pt0_72 (AW), Linda_75 (AW), MrAaronian_75 (AW), ProfFrink_75 (AW), Raunak_76 (AW), Salk_75 (AW), Shiba_74 (AW), Sloopyjoe_75 (AW), Spain_75 (AW), StarLord_75 (AW), Stayer_75 (AW),

Start 14:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GantcherGoblin_87 (AU6), Tenney120_89 (AU6),

Start 15:

- Found in 1 of 53 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stardrop_94 (AU6),

Start 16:

- Found in 3 of 53 (5.7%) of genes in pham
- Manual Annotations of this start: 3 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Argan_88 (AU6), KevinMinion_86 (AU6), Uzumaki_88 (AU6),

Start 19:

- Found in 14 of 53 (26.4%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Michelle_75 (AW),

Summary by clusters:

There are 5 clusters represented in this pham: FI, FK, AM, AW, AU6,

Info for manual annotations of cluster AM:

- Start number 9 was manually annotated 20 times for cluster AM.

Info for manual annotations of cluster AU6:

- Start number 14 was manually annotated 2 times for cluster AU6.
- Start number 16 was manually annotated 3 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 13 was manually annotated 13 times for cluster AW.
- Start number 19 was manually annotated 1 time for cluster AW.

Gene Information:

Gene: Arcadia_89 Start: 52318, Stop: 52563, Start Num: 9

Candidate Starts for Arcadia_89:

(Start: 9 @52318 has 20 MA's), (20, 52384), (21, 52402),

Gene: Argan_88 Start: 50665, Stop: 50889, Start Num: 16

Candidate Starts for Argan_88:

(Start: 16 @50665 has 3 MA's), (25, 50803), (26, 50809), (33, 50854), (34, 50857),

Gene: Arzan_78 Start: 49144, Stop: 49362, Start Num: 12

Candidate Starts for Arzan_78:

(1, 49048), (2, 49087), (4, 49114), (12, 49144), (23, 49246),

Gene: BenitoAntonio_89 Start: 52042, Stop: 52281, Start Num: 9

Candidate Starts for BenitoAntonio_89:

(Start: 9 @52042 has 20 MA's), (20, 52108), (21, 52126), (37, 52267),

Gene: Benllo_90 Start: 52696, Stop: 52941, Start Num: 9

Candidate Starts for Benllo_90:

(Start: 9 @52696 has 20 MA's), (20, 52762), (21, 52780), (22, 52792), (37, 52921),

Gene: Boog_74 Start: 47092, Stop: 47304, Start Num: 13

Candidate Starts for Boog_74:

(3, 47050), (7, 47071), (Start: 13 @47092 has 13 MA's), (18, 47119), (27, 47239), (36, 47290),

Gene: Bowling_93 Start: 53229, Stop: 53474, Start Num: 9

Candidate Starts for Bowling_93:

(Start: 9 @53229 has 20 MA's), (20, 53295), (22, 53325), (37, 53454),

Gene: BronxBay_75 Start: 47373, Stop: 47588, Start Num: 13

Candidate Starts for BronxBay_75:

(3, 47331), (7, 47352), (Start: 13 @47373 has 13 MA's), (Start: 19 @47403 has 1 MA's), (24, 47499), (28, 47535), (36, 47574),

Gene: Cheesy_92 Start: 52787, Stop: 53026, Start Num: 9

Candidate Starts for Cheesy_92:

(Start: 9 @52787 has 20 MA's), (20, 52853), (21, 52871), (22, 52883), (37, 53012),

Gene: Circum_91 Start: 52762, Stop: 53025, Start Num: 9

Candidate Starts for Circum_91:

(Start: 9 @52762 has 20 MA's), (11, 52771), (20, 52828), (21, 52846), (22, 52858), (37, 52987), (38, 52993),

Gene: Correa_87 Start: 51667, Stop: 51912, Start Num: 9

Candidate Starts for Correa_87:

(Start: 9 @51667 has 20 MA's), (20, 51733), (21, 51751),

Gene: Djungelskog_74 Start: 47375, Stop: 47590, Start Num: 13

Candidate Starts for Djungelskog_74:

(3, 47333), (7, 47354), (Start: 13 @47375 has 13 MA's), (Start: 19 @47405 has 1 MA's), (24, 47501), (28, 47537), (36, 47576),

Gene: DoctorPepper_74 Start: 47068, Stop: 47283, Start Num: 13
Candidate Starts for DoctorPepper_74:
(3, 47026), (7, 47047), (Start: 13 @47068 has 13 MA's), (Start: 19 @47098 has 1 MA's), (24, 47194),
(28, 47230), (36, 47269),

Gene: Dynamite_91 Start: 52247, Stop: 52492, Start Num: 9
Candidate Starts for Dynamite_91:
(Start: 9 @52247 has 20 MA's), (20, 52313), (21, 52331), (37, 52472),

Gene: Egad_75 Start: 47342, Stop: 47557, Start Num: 13
Candidate Starts for Egad_75:
(3, 47300), (7, 47321), (Start: 13 @47342 has 13 MA's), (Start: 19 @47372 has 1 MA's), (24, 47468),
(28, 47504), (36, 47543),

Gene: Elsa_89 Start: 52318, Stop: 52563, Start Num: 9
Candidate Starts for Elsa_89:
(Start: 9 @52318 has 20 MA's), (20, 52384), (21, 52402),

Gene: Gandionco_247 Start: 109197, Stop: 109415, Start Num: 6
Candidate Starts for Gandionco_247:
(6, 109197), (8, 109206), (17, 109230),

Gene: GantcherGoblin_87 Start: 50825, Stop: 51037, Start Num: 14
Candidate Starts for GantcherGoblin_87:
(Start: 14 @50825 has 2 MA's), (20, 50867),

Gene: GoCrazy_86 Start: 50946, Stop: 51209, Start Num: 9
Candidate Starts for GoCrazy_86:
(Start: 9 @50946 has 20 MA's), (11, 50955), (20, 51012), (21, 51030), (22, 51042), (37, 51171), (38,
51177),

Gene: Hankly_91 Start: 52131, Stop: 52394, Start Num: 9
Candidate Starts for Hankly_91:
(Start: 9 @52131 has 20 MA's), (20, 52197), (21, 52215), (22, 52227), (37, 52356), (38, 52362),

Gene: Heisenberger_90 Start: 52252, Stop: 52491, Start Num: 9
Candidate Starts for Heisenberger_90:
(Start: 9 @52252 has 20 MA's), (20, 52318), (21, 52336), (22, 52348), (37, 52477),

Gene: HerbBucket_74 Start: 47074, Stop: 47289, Start Num: 13
Candidate Starts for HerbBucket_74:
(3, 47032), (7, 47053), (Start: 13 @47074 has 13 MA's), (24, 47200), (28, 47236), (36, 47275),

Gene: JEGGS_90 Start: 52331, Stop: 52570, Start Num: 9
Candidate Starts for JEGGS_90:
(Start: 9 @52331 has 20 MA's), (20, 52397), (21, 52415), (22, 52427), (37, 52556),

Gene: JeNeSaisPas_240 Start: 109405, Stop: 109605, Start Num: 12
Candidate Starts for JeNeSaisPas_240:
(12, 109405), (29, 109558), (30, 109564),

Gene: JeNeSaisPas_239 Start: 109195, Stop: 109395, Start Num: 12
Candidate Starts for JeNeSaisPas_239:

(12, 109195), (31, 109363), (32, 109366),

Gene: Jeremy4pt0_72 Start: 47060, Stop: 47275, Start Num: 13

Candidate Starts for Jeremy4pt0_72:

(3, 47018), (7, 47039), (Start: 13 @47060 has 13 MA's), (Start: 19 @47090 has 1 MA's), (24, 47186), (28, 47222), (36, 47261),

Gene: Kardesai_90 Start: 51735, Stop: 51980, Start Num: 9

Candidate Starts for Kardesai_90:

(Start: 9 @51735 has 20 MA's), (20, 51801), (21, 51819), (22, 51831), (37, 51960),

Gene: KeaneyLin_88 Start: 51984, Stop: 52247, Start Num: 9

Candidate Starts for KeaneyLin_88:

(Start: 9 @51984 has 20 MA's), (11, 51993), (20, 52050), (21, 52068), (22, 52080), (37, 52209), (38, 52215),

Gene: KevinMinion_86 Start: 51657, Stop: 51881, Start Num: 16

Candidate Starts for KevinMinion_86:

(Start: 16 @51657 has 3 MA's), (25, 51795), (26, 51801), (33, 51846), (34, 51849),

Gene: Kureo_243 Start: 107418, Stop: 107618, Start Num: 12

Candidate Starts for Kureo_243:

(12, 107418), (31, 107586), (32, 107589),

Gene: Kureo_244 Start: 107619, Stop: 107828, Start Num: 10

Candidate Starts for Kureo_244:

(10, 107619), (12, 107628), (29, 107781), (30, 107787),

Gene: Linda_75 Start: 47358, Stop: 47570, Start Num: 13

Candidate Starts for Linda_75:

(3, 47316), (7, 47337), (Start: 13 @47358 has 13 MA's), (18, 47385), (27, 47505), (36, 47556),

Gene: Marianna39_247 Start: 109809, Stop: 110018, Start Num: 8

Candidate Starts for Marianna39_247:

(6, 109800), (8, 109809), (17, 109833),

Gene: Michelle_75 Start: 47402, Stop: 47587, Start Num: 19

Candidate Starts for Michelle_75:

(3, 47330), (7, 47351), (Start: 13 @47372 has 13 MA's), (Start: 19 @47402 has 1 MA's), (24, 47498), (28, 47534), (36, 47573),

Gene: Mooshroom_91 Start: 51735, Stop: 51980, Start Num: 9

Candidate Starts for Mooshroom_91:

(Start: 9 @51735 has 20 MA's), (20, 51801), (21, 51819), (22, 51831), (37, 51960),

Gene: MrAaronian_75 Start: 47372, Stop: 47587, Start Num: 13

Candidate Starts for MrAaronian_75:

(3, 47330), (7, 47351), (Start: 13 @47372 has 13 MA's), (Start: 19 @47402 has 1 MA's), (24, 47498), (28, 47534), (36, 47573),

Gene: Mudcat_86 Start: 53486, Stop: 53725, Start Num: 9

Candidate Starts for Mudcat_86:

(Start: 9 @53486 has 20 MA's), (20, 53552), (21, 53570), (37, 53711),

Gene: NapoleonB_92 Start: 52247, Stop: 52492, Start Num: 9
Candidate Starts for NapoleonB_92:
(Start: 9 @52247 has 20 MA's), (20, 52313), (21, 52331), (37, 52472),

Gene: Nason_89 Start: 52318, Stop: 52563, Start Num: 9
Candidate Starts for Nason_89:
(Start: 9 @52318 has 20 MA's), (20, 52384), (21, 52402),

Gene: ProfFrink_75 Start: 47341, Stop: 47556, Start Num: 13
Candidate Starts for ProfFrink_75:
(3, 47299), (7, 47320), (Start: 13 @47341 has 13 MA's), (Start: 19 @47371 has 1 MA's), (24, 47467),
(28, 47503), (36, 47542),

Gene: Raunak_76 Start: 47051, Stop: 47266, Start Num: 13
Candidate Starts for Raunak_76:
(3, 47009), (7, 47030), (Start: 13 @47051 has 13 MA's), (Start: 19 @47081 has 1 MA's), (24, 47177),
(28, 47213), (36, 47252),

Gene: Salk_75 Start: 47358, Stop: 47570, Start Num: 13
Candidate Starts for Salk_75:
(3, 47316), (7, 47337), (Start: 13 @47358 has 13 MA's), (18, 47385), (27, 47505), (36, 47556),

Gene: Shiba_74 Start: 47067, Stop: 47282, Start Num: 13
Candidate Starts for Shiba_74:
(3, 47025), (7, 47046), (Start: 13 @47067 has 13 MA's), (Start: 19 @47097 has 1 MA's), (24, 47193),
(28, 47229), (36, 47268),

Gene: Sloopyjoe_75 Start: 47374, Stop: 47589, Start Num: 13
Candidate Starts for Sloopyjoe_75:
(3, 47332), (7, 47353), (Start: 13 @47374 has 13 MA's), (18, 47401), (Start: 19 @47404 has 1 MA's),
(24, 47500), (28, 47536), (36, 47575),

Gene: Spain_75 Start: 47372, Stop: 47587, Start Num: 13
Candidate Starts for Spain_75:
(3, 47330), (7, 47351), (Start: 13 @47372 has 13 MA's), (Start: 19 @47402 has 1 MA's), (24, 47498),
(28, 47534), (36, 47573),

Gene: StarLord_75 Start: 47367, Stop: 47582, Start Num: 13
Candidate Starts for StarLord_75:
(3, 47325), (7, 47346), (Start: 13 @47367 has 13 MA's), (Start: 19 @47397 has 1 MA's), (24, 47493),
(28, 47529), (36, 47568),

Gene: Stardrop_94 Start: 52087, Stop: 52284, Start Num: 15
Candidate Starts for Stardrop_94:
(5, 52048), (15, 52087), (35, 52264),

Gene: Stayer_75 Start: 47370, Stop: 47585, Start Num: 13
Candidate Starts for Stayer_75:
(3, 47328), (7, 47349), (Start: 13 @47370 has 13 MA's), (Start: 19 @47400 has 1 MA's), (24, 47496),
(28, 47532), (36, 47571),

Gene: Tenney120_89 Start: 51376, Stop: 51588, Start Num: 14

Candidate Starts for Tenney120_89:
(Start: 14 @51376 has 2 MA's), (20, 51418),

Gene: Tribby_93 Start: 53122, Stop: 53361, Start Num: 9
Candidate Starts for Tribby_93:
(Start: 9 @53122 has 20 MA's), (20, 53188), (21, 53206), (22, 53218), (37, 53347),

Gene: Uzumaki_88 Start: 50799, Stop: 51023, Start Num: 16
Candidate Starts for Uzumaki_88:
(Start: 16 @50799 has 3 MA's), (25, 50937), (26, 50943), (33, 50988), (34, 50991),

Gene: Xenomorph_86 Start: 52536, Stop: 52769, Start Num: 9
Candidate Starts for Xenomorph_86:
(Start: 9 @52536 has 20 MA's), (20, 52602), (21, 52620), (37, 52761),

Gene: YoshiYama_90 Start: 52893, Stop: 53138, Start Num: 9
Candidate Starts for YoshiYama_90:
(8, 52890), (Start: 9 @52893 has 20 MA's), (20, 52959), (21, 52977), (22, 52989), (37, 53118),