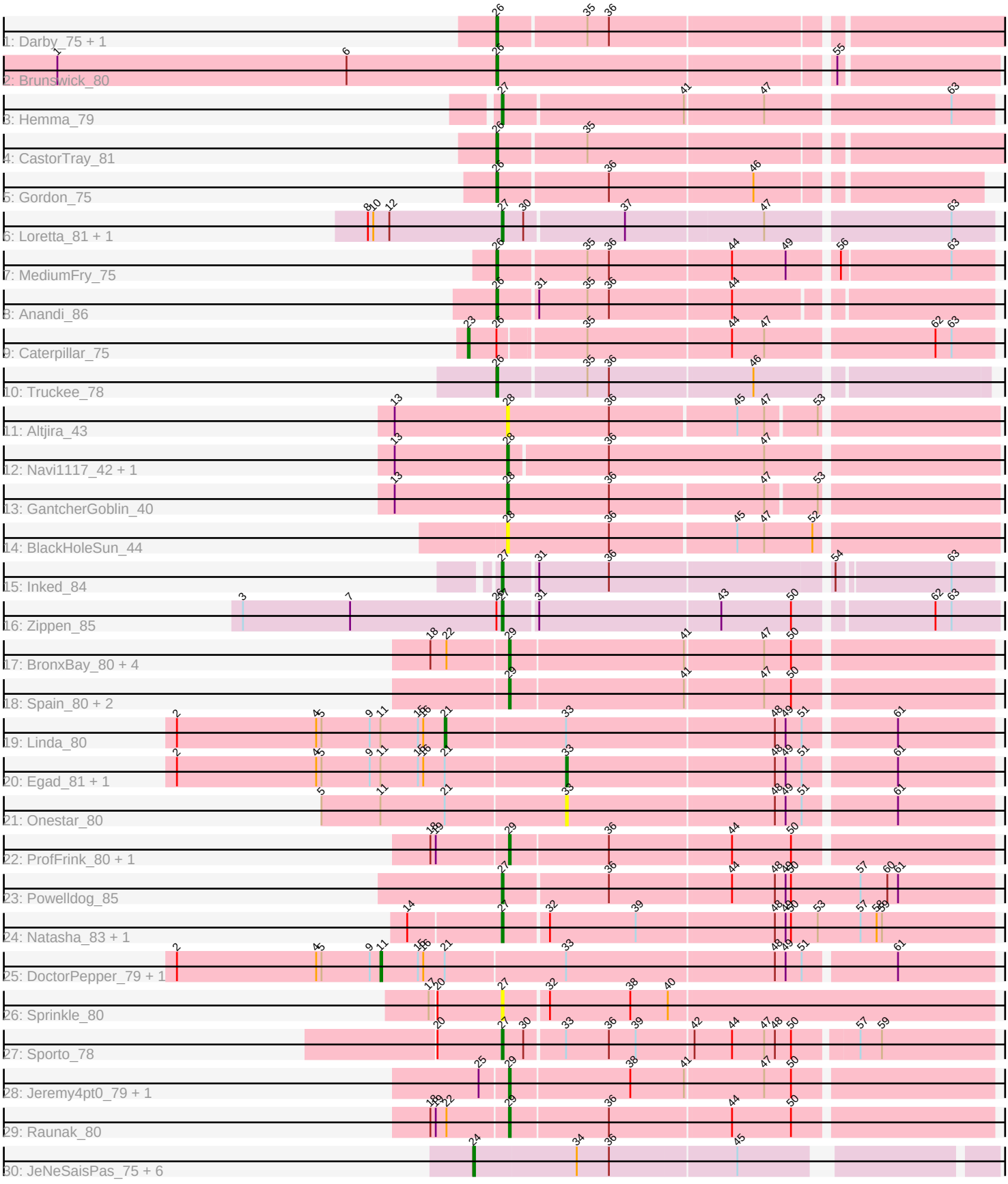
Pham 347716


1: Darby_75 + 1
2: Brunswick_80
3: Hemma_79
4: CastorTray_81
5: Gordon_75
6: Loretta_81 + 1
7: MediumFry_75
8: Anandi_86
9: Caterpillar_75
10: Truckee_78
11: Altjira_43
12: Navi1117_42 + 1
13: GantcherGoblin_40
14: BlackHoleSun_44
15: Inked_84
16: Zippen_85
17: BronxBay_80 + 4
18: Spain_80 + 2
19: Linda_80
20: Egad_81 + 1
21: Onestar_80
22: ProfFrink_80 + 1
23: Powelldog_85
24: Natasha_83 + 1
25: DoctorPepper_79 + 1
26: Sprinkle_80
27: Sporto_78
28: Jeremy4pt0_79 + 1
29: Raunak_80
30: JeNeSaisPas_75 + 6

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 347716 Report

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

Pham number 347716 has 50 members, 9 are drafts.

Phages represented in each track:
- Track 1 : Darby_75, Trustiboi_77
- Track 2 : Brunswick_80
- Track 3 : Hemma_79
- Track 4 : CastorTray_81
- Track 5 : Gordon_75
- Track 6 : Loretta_81, Ingrid_85
- Track 7 : MediumFry_75
- Track 8 : Anandi_86
- Track 9 : Caterpillar_75
- Track 10 : Truckee_78
- Track 11 : Altjira_43
- Track 12 : Navi1117_42, Stardrop_41
- Track 13 : GantcherGoblin_40
- Track 14 : BlackHoleSun_44
- Track 15 : Inked_84
- Track 16 : Zippen_85
- Track 17 : BronxBay_80, Stayer_80, Michelle_80, StarLord_80, Sloopyjoe_80
- Track 18 : Spain_80, MrAaronian_80, Djungelskog_79
- Track 19 : Linda_80
- Track 20 : Egad_81, HerbBucket_80
- Track 21 : Onestar_80
- Track 22 : ProfFrink_80, Salk_80
- Track 23 : Powelldog_85
- Track 24 : Natasha_83, RustyBoy_84
- Track 25 : DoctorPepper_79, Boog_79
- Track 26 : Sprinkle_80
- Track 27 : Sporto_78
- Track 28 : Jeremy4pt0_79, Shiba_79
- Track 29 : Raunak_80
- Track 30 : JeNeSaisPas_75, Kureo_78, Gandionco_76, Qui_79, Paella_79, Marianna39_78, Elver_77

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

The start number called the most often in the published annotations is 29, it was called in 12 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BronxBay_80, Djungelskog_79, Jeremy4pt0_79, Michelle_80, MrAaronian_80, ProfFrink_80, Raunak_80, Salk_80, Shiba_79, Sloopyjoe_80, Spain_80, StarLord_80, Stayer_80,

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

Genes that do not have the "Most Annotated" start:
• Altjira_43, Anandi_86, BlackHoleSun_44, Boog_79, Brunswick_80, CastorTray_81, Caterpillar_75, Darby_75, DoctorPepper_79, Egad_81, Elver_77, Gandionco_76, GantcherGoblin_40, Gordon_75, Hemma_79, HerbBucket_80, Ingrid_85, Inked_84, JeNeSaisPas_75, Kureo_78, Linda_80, Loretta_81, Marianna39_78, MediumFry_75, Natasha_83, Navi1117_42, Onestar_80, Paella_79, Powelldog_85, Qui_79, RustyBoy_84, Sporto_78, Sprinkle_80, Stardrop_41, Truckee_78, Trustiboi_77, Zippen_85,

Summary by start number:

Start 11:
• Found in 6 of 50 (12.0%) of genes in pham
• Manual Annotations of this start: 2 of 41
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Boog_79 (AW), DoctorPepper_79 (AW),

Start 21:
• Found in 6 of 50 (12.0%) of genes in pham
• Manual Annotations of this start: 1 of 41
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Linda_80 (AW),

Start 23:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Caterpillar_75 (AU4),

Start 24:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 4 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_77 (FK), Gandionco_76 (FK), JeNeSaisPas_75 (FK), Kureo_78 (FK), Marianna39_78 (FK), Paella_79 (FK), Qui_79 (FK),

Start 26:
• Found in 10 of 50 (20.0%) of genes in pham
• Manual Annotations of this start: 8 of 41
• Called 80.0% of time when present

• Phage (with cluster) where this start called: Anandi_86 (AU4), Brunswick_80 (AU1), CastorTray_81 (AU1), Darby_75 (AU1), Gordon_75 (AU1), MediumFry_75 (AU4), Truckee_78 (AU5), Trustiboi_77 (AU1),

Start 27:
• Found in 10 of 50 (20.0%) of genes in pham
• Manual Annotations of this start: 9 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hemma_79 (AU1), Ingrid_85 (AU3), Inked_84 (AU7), Loretta_81 (AU3), Natasha_83 (AW), Powelldog_85 (AW), RustyBoy_84 (AW), Sporto_78 (AW), Sprinkle_80 (AW), Zippen_85 (AU7),

Start 28:
• Found in 5 of 50 (10.0%) of genes in pham
• Manual Annotations of this start: 3 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altjira_43 (AU6), BlackHoleSun_44 (AU6), GantcherGoblin_40 (AU6), Navi1117_42 (AU6), Stardrop_41 (AU6),

Start 29:
• Found in 13 of 50 (26.0%) of genes in pham
• Manual Annotations of this start: 12 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BronxBay_80 (AW), Djungelskog_79 (AW), Jeremy4pt0_79 (AW), Michelle_80 (AW), MrAaronian_80 (AW), ProfFrink_80 (AW), Raunak_80 (AW), Salk_80 (AW), Shiba_79 (AW), Sloopyjoe_80 (AW), Spain_80 (AW), StarLord_80 (AW), Stayer_80 (AW),

Start 33:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 1 of 41
• Called 42.9% of time when present
• Phage (with cluster) where this start called: Egad_81 (AW), HerbBucket_80 (AW), Onestar_80 (AW),

Summary by clusters:

There are 8 clusters represented in this pham: AU7, AU1, AU3, AU5, AU4, AW, AU6, FK,

Info for manual annotations of cluster AU1:
•Start number 26 was manually annotated 5 times for cluster AU1.
•Start number 27 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU3:
•Start number 27 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:
•Start number 23 was manually annotated 1 time for cluster AU4.
•Start number 26 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 26 was manually annotated 1 time for cluster AU5.

Info for manual annotations of cluster AU6:
•Start number 28 was manually annotated 3 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 27 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:
•Start number 11 was manually annotated 2 times for cluster AW.
•Start number 21 was manually annotated 1 time for cluster AW.
•Start number 27 was manually annotated 4 times for cluster AW.
•Start number 29 was manually annotated 12 times for cluster AW.
•Start number 33 was manually annotated 1 time for cluster AW.

Info for manual annotations of cluster FK:
•Start number 24 was manually annotated 4 times for cluster FK.

Gene Information:

Gene: Altjira_43 Start: 31618, Stop: 31881, Start Num: 28
Candidate Starts for Altjira_43:
(13, 31555), (Start: 28 @31618 has 3 MA's), (36, 31675), (45, 31744), (47, 31759), (53, 31786),

Gene: Anandi_86 Start: 51309, Stop: 51569, Start Num: 26
Candidate Starts for Anandi_86:
(Start: 26 @51309 has 8 MA's), (31, 51330), (35, 51357), (36, 51369), (44, 51435),

Gene: BlackHoleSun_44 Start: 30591, Stop: 30857, Start Num: 28
Candidate Starts for BlackHoleSun_44:
(Start: 28 @30591 has 3 MA's), (36, 30648), (45, 30717), (47, 30732), (52, 30759),

Gene: Boog_79 Start: 48864, Stop: 49196, Start Num: 11
Candidate Starts for Boog_79:
(2, 48750), (4, 48828), (5, 48831), (9, 48858), (Start: 11 @48864 has 2 MA's), (15, 48885), (16, 48888), (Start: 21 @48900 has 1 MA's), (Start: 33 @48966 has 1 MA's), (48, 49080), (49, 49086), (51, 49095), (61, 49143),

Gene: BronxBay_80 Start: 49187, Stop: 49447, Start Num: 29
Candidate Starts for BronxBay_80:
(18, 49145), (22, 49154), (Start: 29 @49187 has 12 MA's), (41, 49283), (47, 49325), (50, 49340),

Gene: Brunswick_80 Start: 51050, Stop: 51316, Start Num: 26
Candidate Starts for Brunswick_80:
(1, 50804), (6, 50966), (Start: 26 @51050 has 8 MA's), (55, 51230),

Gene: CastorTray_81 Start: 51434, Stop: 51715, Start Num: 26
Candidate Starts for CastorTray_81:
(Start: 26 @51434 has 8 MA's), (35, 51482),

Gene: Caterpillar_75 Start: 50096, Stop: 50374, Start Num: 23
Candidate Starts for Caterpillar_75:

(Start: 23 @50096 has 1 MA's), (Start: 26 @50111 has 8 MA's), (35, 50156), (44, 50234), (47, 50252), (62, 50342), (63, 50351),

Gene: Darby_75 Start: 50480, Stop: 50761, Start Num: 26
Candidate Starts for Darby_75:
(Start: 26 @50480 has 8 MA's), (35, 50528), (36, 50540),

Gene: Djungelskog_79 Start: 49189, Stop: 49449, Start Num: 29
Candidate Starts for Djungelskog_79:
(Start: 29 @49189 has 12 MA's), (41, 49285), (47, 49327), (50, 49342),

Gene: DoctorPepper_79 Start: 48848, Stop: 49180, Start Num: 11
Candidate Starts for DoctorPepper_79:
(2, 48734), (4, 48812), (5, 48815), (9, 48842), (Start: 11 @48848 has 2 MA's), (15, 48869), (16, 48872), (Start: 21 @48884 has 1 MA's), (Start: 33 @48950 has 1 MA's), (48, 49064), (49, 49070), (51, 49079), (61, 49127),

Gene: Egad_81 Start: 49224, Stop: 49454, Start Num: 33
Candidate Starts for Egad_81:
(2, 49008), (4, 49086), (5, 49089), (9, 49116), (Start: 11 @49122 has 2 MA's), (15, 49143), (16, 49146), (Start: 21 @49158 has 1 MA's), (Start: 33 @49224 has 1 MA's), (48, 49338), (49, 49344), (51, 49353), (61, 49401),

Gene: Elver_77 Start: 46880, Stop: 47149, Start Num: 24
Candidate Starts for Elver_77:
(Start: 24 @46880 has 4 MA's), (34, 46937), (36, 46955), (45, 47024),

Gene: Gandionco_76 Start: 46778, Stop: 47047, Start Num: 24
Candidate Starts for Gandionco_76:
(Start: 24 @46778 has 4 MA's), (34, 46835), (36, 46853), (45, 46922),

Gene: GantcherGoblin_40 Start: 30430, Stop: 30693, Start Num: 28
Candidate Starts for GantcherGoblin_40:
(13, 30367), (Start: 28 @30430 has 3 MA's), (36, 30487), (47, 30571), (53, 30598),

Gene: Gordon_75 Start: 51276, Stop: 51530, Start Num: 26
Candidate Starts for Gordon_75:
(Start: 26 @51276 has 8 MA's), (36, 51336), (46, 51414),

Gene: Hemma_79 Start: 48693, Stop: 48956, Start Num: 27
Candidate Starts for Hemma_79:
(Start: 27 @48693 has 9 MA's), (41, 48792), (47, 48834), (63, 48933),

Gene: HerbBucket_80 Start: 48950, Stop: 49180, Start Num: 33
Candidate Starts for HerbBucket_80:
(2, 48734), (4, 48812), (5, 48815), (9, 48842), (Start: 11 @48848 has 2 MA's), (15, 48869), (16, 48872), (Start: 21 @48884 has 1 MA's), (Start: 33 @48950 has 1 MA's), (48, 49064), (49, 49070), (51, 49079), (61, 49127),

Gene: Ingrid_85 Start: 51217, Stop: 51480, Start Num: 27
Candidate Starts for Ingrid_85:
(8, 51142), (10, 51145), (12, 51154), (Start: 27 @51217 has 9 MA's), (30, 51229), (37, 51283), (47, 51358), (63, 51457),

Gene: Inked_84 Start: 51766, Stop: 52023, Start Num: 27
Candidate Starts for Inked_84:
(Start: 27 @51766 has 9 MA's), (31, 51784), (36, 51823), (54, 51940), (63, 52000),

Gene: JeNeSaisPas_75 Start: 47358, Stop: 47627, Start Num: 24
Candidate Starts for JeNeSaisPas_75:
(Start: 24 @47358 has 4 MA's), (34, 47415), (36, 47433), (45, 47502),

Gene: Jeremy4pt0_79 Start: 48874, Stop: 49134, Start Num: 29
Candidate Starts for Jeremy4pt0_79:
(25, 48859), (Start: 29 @48874 has 12 MA's), (38, 48940), (41, 48970), (47, 49012), (50, 49027),

Gene: Kureo_78 Start: 46178, Stop: 46447, Start Num: 24
Candidate Starts for Kureo_78:
(Start: 24 @46178 has 4 MA's), (34, 46235), (36, 46253), (45, 46322),

Gene: Linda_80 Start: 49171, Stop: 49467, Start Num: 21
Candidate Starts for Linda_80:
(2, 49021), (4, 49099), (5, 49102), (9, 49129), (Start: 11 @49135 has 2 MA's), (15, 49156), (16, 49159), (Start: 21 @49171 has 1 MA's), (Start: 33 @49237 has 1 MA's), (48, 49351), (49, 49357), (51, 49366), (61, 49414),

Gene: Loretta_81 Start: 51217, Stop: 51480, Start Num: 27
Candidate Starts for Loretta_81:
(8, 51142), (10, 51145), (12, 51154), (Start: 27 @51217 has 9 MA's), (30, 51229), (37, 51283), (47, 51358), (63, 51457),

Gene: Marianna39_78 Start: 47353, Stop: 47622, Start Num: 24
Candidate Starts for Marianna39_78:
(Start: 24 @47353 has 4 MA's), (34, 47410), (36, 47428), (45, 47497),

Gene: MediumFry_75 Start: 50571, Stop: 50834, Start Num: 26
Candidate Starts for MediumFry_75:
(Start: 26 @50571 has 8 MA's), (35, 50619), (36, 50631), (44, 50697), (49, 50727), (56, 50751), (63, 50811),

Gene: Michelle_80 Start: 49186, Stop: 49446, Start Num: 29
Candidate Starts for Michelle_80:
(18, 49144), (22, 49153), (Start: 29 @49186 has 12 MA's), (41, 49282), (47, 49324), (50, 49339),

Gene: MrAaronian_80 Start: 49186, Stop: 49446, Start Num: 29
Candidate Starts for MrAaronian_80:
(Start: 29 @49186 has 12 MA's), (41, 49282), (47, 49324), (50, 49339),

Gene: Natasha_83 Start: 49509, Stop: 49778, Start Num: 27
Candidate Starts for Natasha_83:
(14, 49458), (Start: 27 @49509 has 9 MA's), (32, 49533), (39, 49581), (48, 49656), (49, 49662), (50, 49665), (53, 49680), (57, 49704), (58, 49713), (59, 49716),

Gene: Navi1117_42 Start: 30843, Stop: 31109, Start Num: 28
Candidate Starts for Navi1117_42:
(13, 30780), (Start: 28 @30843 has 3 MA's), (36, 30897), (47, 30984),

Gene: Onestar_80 Start: 49456, Stop: 49686, Start Num: 33
Candidate Starts for Onestar_80:
(5, 49321), (Start: 11 @49354 has 2 MA's), (Start: 21 @49390 has 1 MA's), (Start: 33 @49456 has 1 MA's), (48, 49570), (49, 49576), (51, 49585), (61, 49633),

Gene: Paella_79 Start: 47473, Stop: 47742, Start Num: 24
Candidate Starts for Paella_79:
(Start: 24 @47473 has 4 MA's), (34, 47530), (36, 47548), (45, 47617),

Gene: Powelldog_85 Start: 50422, Stop: 50691, Start Num: 27
Candidate Starts for Powelldog_85:
(Start: 27 @50422 has 9 MA's), (36, 50479), (44, 50545), (48, 50569), (49, 50575), (50, 50578), (57, 50617), (60, 50632), (61, 50638),

Gene: ProfFrink_80 Start: 49155, Stop: 49415, Start Num: 29
Candidate Starts for ProfFrink_80:
(18, 49113), (19, 49116), (Start: 29 @49155 has 12 MA's), (36, 49209), (44, 49275), (50, 49308),

Gene: Qui_79 Start: 47473, Stop: 47742, Start Num: 24
Candidate Starts for Qui_79:
(Start: 24 @47473 has 4 MA's), (34, 47530), (36, 47548), (45, 47617),

Gene: Raunak_80 Start: 48865, Stop: 49125, Start Num: 29
Candidate Starts for Raunak_80:
(18, 48823), (19, 48826), (22, 48832), (Start: 29 @48865 has 12 MA's), (36, 48919), (44, 48985), (50, 49018),

Gene: RustyBoy_84 Start: 49708, Stop: 49977, Start Num: 27
Candidate Starts for RustyBoy_84:
(14, 49657), (Start: 27 @49708 has 9 MA's), (32, 49732), (39, 49780), (48, 49855), (49, 49861), (50, 49864), (53, 49879), (57, 49903), (58, 49912), (59, 49915),

Gene: Salk_80 Start: 49169, Stop: 49429, Start Num: 29
Candidate Starts for Salk_80:
(18, 49127), (19, 49130), (Start: 29 @49169 has 12 MA's), (36, 49223), (44, 49289), (50, 49322),

Gene: Shiba_79 Start: 48881, Stop: 49141, Start Num: 29
Candidate Starts for Shiba_79:
(25, 48866), (Start: 29 @48881 has 12 MA's), (38, 48947), (41, 48977), (47, 49019), (50, 49034),

Gene: Sloopyjoe_80 Start: 49188, Stop: 49448, Start Num: 29
Candidate Starts for Sloopyjoe_80:
(18, 49146), (22, 49155), (Start: 29 @49188 has 12 MA's), (41, 49284), (47, 49326), (50, 49341),

Gene: Spain_80 Start: 49186, Stop: 49446, Start Num: 29
Candidate Starts for Spain_80:
(Start: 29 @49186 has 12 MA's), (41, 49282), (47, 49324), (50, 49339),

Gene: Sporto_78 Start: 49862, Stop: 50125, Start Num: 27
Candidate Starts for Sporto_78:
(20, 49826), (Start: 27 @49862 has 9 MA's), (30, 49874), (Start: 33 @49895 has 1 MA's), (36, 49919), (39, 49934), (42, 49964), (44, 49985), (47, 50003), (48, 50009), (50, 50018), (57, 50051), (59, 50063),

Gene: Sprinkle_80 Start: 49799, Stop: 50068, Start Num: 27
Candidate Starts for Sprinkle_80:
(17, 49760), (20, 49763), (Start: 27 @49799 has 9 MA's), (32, 49823), (38, 49868), (40, 49889),

Gene: StarLord_80 Start: 49181, Stop: 49441, Start Num: 29
Candidate Starts for StarLord_80:
(18, 49139), (22, 49148), (Start: 29 @49181 has 12 MA's), (41, 49277), (47, 49319), (50, 49334),

Gene: Stardrop_41 Start: 30860, Stop: 31126, Start Num: 28
Candidate Starts for Stardrop_41:
(13, 30797), (Start: 28 @30860 has 3 MA's), (36, 30914), (47, 31001),

Gene: Stayer_80 Start: 49184, Stop: 49444, Start Num: 29
Candidate Starts for Stayer_80:
(18, 49142), (22, 49151), (Start: 29 @49184 has 12 MA's), (41, 49280), (47, 49322), (50, 49337),

Gene: Truckee_78 Start: 51261, Stop: 51521, Start Num: 26
Candidate Starts for Truckee_78:
(Start: 26 @51261 has 8 MA's), (35, 51309), (36, 51321), (46, 51399),

Gene: Trustiboi_77 Start: 51124, Stop: 51387, Start Num: 26
Candidate Starts for Trustiboi_77:
(Start: 26 @51124 has 8 MA's), (35, 51172), (36, 51184),

Gene: Zippen_85 Start: 51805, Stop: 52068, Start Num: 27
Candidate Starts for Zippen_85:
(3, 51661), (7, 51721), (Start: 26 @51802 has 8 MA's), (Start: 27 @51805 has 9 MA's), (31, 51823), (43, 51922), (50, 51961), (62, 52033), (63, 52042),