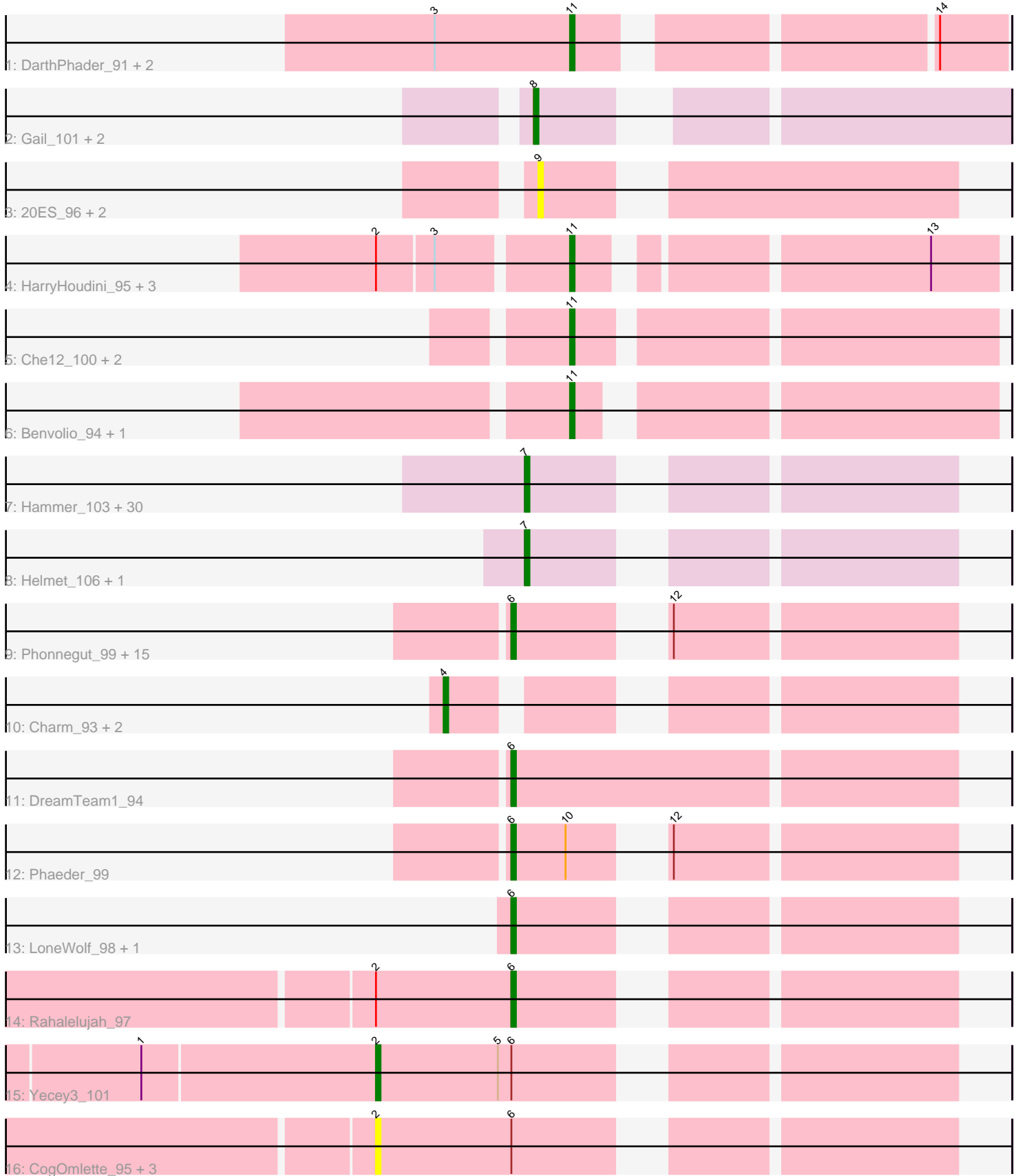


Pham 296494



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 296494 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296494 has 80 members, 8 are drafts.

Phages represented in each track:

- Track 1 : DarthPhader_91, Refuge_91, Zimmer_90
- Track 2 : Gail_101, Jeeves_101, SororFago_97
- Track 3 : 20ES_96, CRB1_94, First_0095
- Track 4 : HarryHoudini_95, Flare16_96, Baehexic_96, Piro94_94
- Track 5 : Che12_100, Ph8s_99, Adzzy_98
- Track 6 : Benvolio_94, Echild_99
- Track 7 : Hammer_103, Newrala_101, CloudWang3_105, Artemis2UCLA_104, Blue7_104, VohminGhazi_102, Koko_104, Kazan_103, BlessJoy_103, Roksolana_105, Jeffabunny_93, Rifter_103, Cookiedough_100, DaVinci_99, EricB_99, Wiks_102, Priamo_100, Iwokeuplikedis_97, Tucker_103, Chartreuse_101, Hoot_97, Gruunaga_103, Hexamo_104, SuperAwesome_101, McFly_101, SmellyB_102, BABullseye_95, WunderPhul_91, JewelBug_93, Isiphiwo_98, Zaka_103
- Track 8 : Helmet_106, Dorothea_101
- Track 9 : Phonnegut_99, Eidsmoe_96, Myxus_99, Beemo_99, Qobbit_96, Priya_96, Alma_96, Conquerage_96, Pioneer_99, Catalina_101, HortumSL17_100, EmyBug_95, Aliter_92, Tubs_99, Spouty_96, Scherzo_97
- Track 10 : Charm_93, Klodlith_94, Sheakeira_93
- Track 11 : DreamTeam1_94
- Track 12 : Phaeder_99
- Track 13 : LoneWolf_98, Darrell_96
- Track 14 : Rahalelujah_97
- Track 15 : Yecey3_101
- Track 16 : CogOmlette_95, WorldCup_96, Bellris_95, Minispark_95

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

The start number called the most often in the published annotations is 7, it was called in 33 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_104, BABullseye_95, BlessJoy_103, Blue7_104, Chartreuse_101, CloudWang3_105, Cookiedough_100, DaVinci_99, Dorothea_101, EricB_99, Gruunaga_103, Hammer_103, Helmet_106, Hexamo_104, Hoot_97, Isiphiwo_98,

Iwokeuplikedis_97, Jeffabunny_93, JewelBug_93, Kazan_103, Koko_104, McFly_101, Newrala_101, Priamo_100, Rifter_103, Roksolana_105, SmellyB_102, SuperAwesome_101, Tucker_103, VohminGhazi_102, Wiks_102, WunderPhul_91, Zaka_103,

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

-

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

- 20ES_96, Adzzy_98, Aliter_92, Alma_96, Baehexic_96, Beemo_99, Bellris_95, Benvolio_94, CRB1_94, Catalina_101, Charm_93, Che12_100, CogOmlette_95, Conquerage_96, Darrell_96, DarthPhader_91, DreamTeam1_94, Echild_99, Eidsmoe_96, EmyBug_95, First_0095, Flare16_96, Gail_101, HarryHoudini_95, HortumSL17_100, Jeeves_101, Klodlith_94, LoneWolf_98, Minispark_95, Myxus_99, Ph8s_99, Phaeder_99, Phonnegut_99, Pioneer_99, Piro94_94, Priya_96, Qobbit_96, Rahalelujah_97, Refuge_91, Scherzo_97, SheaKeira_93, SororFago_97, Spouty_96, Tubs_99, WorldCup_96, Yecey3_101, Zimmer_90,

Summary by start number:

Start 2:

- Found in 10 of 80 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 72
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bellris_95 (A9), CogOmlette_95 (A9), Minispark_95 (A9), WorldCup_96 (A9), Yecey3_101 (A9),

Start 4:

- Found in 3 of 80 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Charm_93 (A9), Klodlith_94 (A9), SheaKeira_93 (A9),

Start 6:

- Found in 26 of 80 (32.5%) of genes in pham
- Manual Annotations of this start: 21 of 72
- Called 80.8% of time when present
- Phage (with cluster) where this start called: Aliter_92 (A9), Alma_96 (A9), Beemo_99 (A9), Catalina_101 (A9), Conquerage_96 (A9), Darrell_96 (A9), DreamTeam1_94 (A9), Eidsmoe_96 (A9), EmyBug_95 (A9), HortumSL17_100 (A9), LoneWolf_98 (A9), Myxus_99 (A9), Phaeder_99 (A9), Phonnegut_99 (A9), Pioneer_99 (A9), Priya_96 (A9), Qobbit_96 (A9), Rahalelujah_97 (A9), Scherzo_97 (A9), Spouty_96 (A9), Tubs_99 (A9),

Start 7:

- Found in 33 of 80 (41.2%) of genes in pham
- Manual Annotations of this start: 33 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_104 (A6), BABullseye_95 (A6), BlessJoy_103 (A6), Blue7_104 (A6), Chartreuse_101 (A6), CloudWang3_105 (A6), Cookiedough_100 (A6), DaVinci_99 (A6), Dorothea_101 (A6), EricB_99 (A6), Gruunaga_103 (A6), Hammer_103 (A6), Helmet_106 (A6),

Hexamo_104 (A6), Hoot_97 (A6), Isiphiwo_98 (A6), Iwokeuplikedis_97 (A2), Jeffabunny_93 (A6), JewelBug_93 (A6), Kazan_103 (A6), Koko_104 (A6), McFly_101 (A6), Newrala_101 (A6), Priamo_100 (A6), Rifter_103 (A6), Roksolana_105 (A6), SmellyB_102 (A6), SuperAwesome_101 (A6), Tucker_103 (A6), VohminGhazi_102 (A6), Wiks_102 (A6), WunderPhul_91 (A6), Zaka_103 (A6),

Start 8:

- Found in 3 of 80 (3.8%) of genes in pham
- Manual Annotations of this start: 3 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_101 (A14), Jeeves_101 (A14), SororFago_97 (A14),

Start 9:

- Found in 3 of 80 (3.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_96 (A2), CRB1_94 (A2), First_0095 (A2),

Start 11:

- Found in 12 of 80 (15.0%) of genes in pham
- Manual Annotations of this start: 12 of 72
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adzzy_98 (A2), Baehexic_96 (A2), Benvolio_94 (A2), Che12_100 (A2), DarthPhader_91 (A12), Echild_99 (A2), Flare16_96 (A2), HarryHoudini_95 (A2), Ph8s_99 (A2), Piro94_94 (A2), Refuge_91 (A12), Zimmer_90 (A12),

Summary by clusters:

There are 5 clusters represented in this pham: A9, A14, A2, A12, A6,

Info for manual annotations of cluster A12:

- Start number 11 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 8 was manually annotated 3 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 7 was manually annotated 1 time for cluster A2.
- Start number 11 was manually annotated 9 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 7 was manually annotated 32 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 2 was manually annotated 1 time for cluster A9.
- Start number 4 was manually annotated 2 times for cluster A9.
- Start number 6 was manually annotated 21 times for cluster A9.

Gene Information:

Gene: 20ES_96 Start: 51549, Stop: 51469, Start Num: 9
Candidate Starts for 20ES_96:
(9, 51549),

Gene: Adzzy_98 Start: 50880, Stop: 50794, Start Num: 11
Candidate Starts for Adzzy_98:
(Start: 11 @50880 has 12 MA's),

Gene: Aliter_92 Start: 48676, Stop: 48593, Start Num: 6
Candidate Starts for Aliter_92:
(Start: 6 @48676 has 21 MA's), (12, 48652),

Gene: Alma_96 Start: 51386, Stop: 51303, Start Num: 6
Candidate Starts for Alma_96:
(Start: 6 @51386 has 21 MA's), (12, 51362),

Gene: Artemis2UCLA_104 Start: 50753, Stop: 50673, Start Num: 7
Candidate Starts for Artemis2UCLA_104:
(Start: 7 @50753 has 33 MA's),

Gene: BABullseye_95 Start: 48891, Stop: 48811, Start Num: 7
Candidate Starts for BABullseye_95:
(Start: 7 @48891 has 33 MA's),

Gene: Baehexic_96 Start: 51625, Stop: 51542, Start Num: 11
Candidate Starts for Baehexic_96:
(Start: 2 @51664 has 1 MA's), (3, 51652), (Start: 11 @51625 has 12 MA's), (13, 51556),

Gene: Beemo_99 Start: 51507, Stop: 51424, Start Num: 6
Candidate Starts for Beemo_99:
(Start: 6 @51507 has 21 MA's), (12, 51483),

Gene: Bellris_95 Start: 51038, Stop: 50925, Start Num: 2
Candidate Starts for Bellris_95:
(Start: 2 @51038 has 1 MA's), (Start: 6 @51008 has 21 MA's),

Gene: Benvolio_94 Start: 51606, Stop: 51523, Start Num: 11
Candidate Starts for Benvolio_94:
(Start: 11 @51606 has 12 MA's),

Gene: BlessJoy_103 Start: 50950, Stop: 50870, Start Num: 7
Candidate Starts for BlessJoy_103:
(Start: 7 @50950 has 33 MA's),

Gene: Blue7_104 Start: 50660, Stop: 50580, Start Num: 7
Candidate Starts for Blue7_104:
(Start: 7 @50660 has 33 MA's),

Gene: CRB1_94 Start: 51399, Stop: 51319, Start Num: 9
Candidate Starts for CRB1_94:
(9, 51399),

Gene: Catalina_101 Start: 51620, Stop: 51537, Start Num: 6
Candidate Starts for Catalina_101:
(Start: 6 @51620 has 21 MA's), (12, 51596),

Gene: Charm_93 Start: 50874, Stop: 50782, Start Num: 4
Candidate Starts for Charm_93:
(Start: 4 @50874 has 2 MA's),

Gene: Chartreuse_101 Start: 49900, Stop: 49820, Start Num: 7
Candidate Starts for Chartreuse_101:
(Start: 7 @49900 has 33 MA's),

Gene: Che12_100 Start: 51350, Stop: 51264, Start Num: 11
Candidate Starts for Che12_100:
(Start: 11 @51350 has 12 MA's),

Gene: CloudWang3_105 Start: 51282, Stop: 51202, Start Num: 7
Candidate Starts for CloudWang3_105:
(Start: 7 @51282 has 33 MA's),

Gene: CogOmlette_95 Start: 51035, Stop: 50922, Start Num: 2
Candidate Starts for CogOmlette_95:
(Start: 2 @51035 has 1 MA's), (Start: 6 @51005 has 21 MA's),

Gene: Conquerage_96 Start: 51162, Stop: 51079, Start Num: 6
Candidate Starts for Conquerage_96:
(Start: 6 @51162 has 21 MA's), (12, 51138),

Gene: Cookiedough_100 Start: 50874, Stop: 50794, Start Num: 7
Candidate Starts for Cookiedough_100:
(Start: 7 @50874 has 33 MA's),

Gene: DaVinci_99 Start: 49954, Stop: 49874, Start Num: 7
Candidate Starts for DaVinci_99:
(Start: 7 @49954 has 33 MA's),

Gene: Darrell_96 Start: 50493, Stop: 50410, Start Num: 6
Candidate Starts for Darrell_96:
(Start: 6 @50493 has 21 MA's),

Gene: DarthPhader_91 Start: 51639, Stop: 51556, Start Num: 11
Candidate Starts for DarthPhader_91:
(3, 51669), (Start: 11 @51639 has 12 MA's), (14, 51570),

Gene: Dorothea_101 Start: 51054, Stop: 50974, Start Num: 7
Candidate Starts for Dorothea_101:
(Start: 7 @51054 has 33 MA's),

Gene: DreamTeam1_94 Start: 50836, Stop: 50741, Start Num: 6
Candidate Starts for DreamTeam1_94:
(Start: 6 @50836 has 21 MA's),

Gene: Echild_99 Start: 51630, Stop: 51547, Start Num: 11
Candidate Starts for Echild_99:
(Start: 11 @51630 has 12 MA's),

Gene: Eidsmoe_96 Start: 51155, Stop: 51072, Start Num: 6
Candidate Starts for Eidsmoe_96:
(Start: 6 @51155 has 21 MA's), (12, 51131),

Gene: EmyBug_95 Start: 51157, Stop: 51074, Start Num: 6
Candidate Starts for EmyBug_95:
(Start: 6 @51157 has 21 MA's), (12, 51133),

Gene: EricB_99 Start: 50099, Stop: 50019, Start Num: 7
Candidate Starts for EricB_99:
(Start: 7 @50099 has 33 MA's),

Gene: First_0095 Start: 51452, Stop: 51372, Start Num: 9
Candidate Starts for First_0095:
(9, 51452),

Gene: Flare16_96 Start: 51348, Stop: 51265, Start Num: 11
Candidate Starts for Flare16_96:
(Start: 2 @51387 has 1 MA's), (3, 51375), (Start: 11 @51348 has 12 MA's), (13, 51279),

Gene: Gail_101 Start: 51991, Stop: 51902, Start Num: 8
Candidate Starts for Gail_101:
(Start: 8 @51991 has 3 MA's),

Gene: Gruunaga_103 Start: 50567, Stop: 50487, Start Num: 7
Candidate Starts for Gruunaga_103:
(Start: 7 @50567 has 33 MA's),

Gene: Hammer_103 Start: 50264, Stop: 50184, Start Num: 7
Candidate Starts for Hammer_103:
(Start: 7 @50264 has 33 MA's),

Gene: HarryHoudini_95 Start: 51214, Stop: 51131, Start Num: 11
Candidate Starts for HarryHoudini_95:
(Start: 2 @51253 has 1 MA's), (3, 51241), (Start: 11 @51214 has 12 MA's), (13, 51145),

Gene: Helmet_106 Start: 51036, Stop: 50956, Start Num: 7
Candidate Starts for Helmet_106:
(Start: 7 @51036 has 33 MA's),

Gene: Hexamo_104 Start: 50768, Stop: 50688, Start Num: 7
Candidate Starts for Hexamo_104:
(Start: 7 @50768 has 33 MA's),

Gene: Hoot_97 Start: 48416, Stop: 48336, Start Num: 7
Candidate Starts for Hoot_97:
(Start: 7 @48416 has 33 MA's),

Gene: HortumSL17_100 Start: 51621, Stop: 51538, Start Num: 6

Candidate Starts for HortumSL17_100:
(Start: 6 @51621 has 21 MA's), (12, 51597),

Gene: Isiphiwo_98 Start: 50318, Stop: 50238, Start Num: 7
Candidate Starts for Isiphiwo_98:
(Start: 7 @50318 has 33 MA's),

Gene: Iwokeuplikedis_97 Start: 51725, Stop: 51645, Start Num: 7
Candidate Starts for Iwokeuplikedis_97:
(Start: 7 @51725 has 33 MA's),

Gene: Jeeves_101 Start: 50780, Stop: 50691, Start Num: 8
Candidate Starts for Jeeves_101:
(Start: 8 @50780 has 3 MA's),

Gene: Jeffabunny_93 Start: 47371, Stop: 47291, Start Num: 7
Candidate Starts for Jeffabunny_93:
(Start: 7 @47371 has 33 MA's),

Gene: JewelBug_93 Start: 48747, Stop: 48667, Start Num: 7
Candidate Starts for JewelBug_93:
(Start: 7 @48747 has 33 MA's),

Gene: Kazan_103 Start: 50569, Stop: 50489, Start Num: 7
Candidate Starts for Kazan_103:
(Start: 7 @50569 has 33 MA's),

Gene: Klodlith_94 Start: 50947, Stop: 50855, Start Num: 4
Candidate Starts for Klodlith_94:
(Start: 4 @50947 has 2 MA's),

Gene: Koko_104 Start: 51281, Stop: 51201, Start Num: 7
Candidate Starts for Koko_104:
(Start: 7 @51281 has 33 MA's),

Gene: LoneWolf_98 Start: 51497, Stop: 51414, Start Num: 6
Candidate Starts for LoneWolf_98:
(Start: 6 @51497 has 21 MA's),

Gene: McFly_101 Start: 50908, Stop: 50828, Start Num: 7
Candidate Starts for McFly_101:
(Start: 7 @50908 has 33 MA's),

Gene: Minispark_95 Start: 51032, Stop: 50919, Start Num: 2
Candidate Starts for Minispark_95:
(Start: 2 @51032 has 1 MA's), (Start: 6 @51002 has 21 MA's),

Gene: Myxus_99 Start: 51621, Stop: 51538, Start Num: 6
Candidate Starts for Myxus_99:
(Start: 6 @51621 has 21 MA's), (12, 51597),

Gene: Newrala_101 Start: 51007, Stop: 50927, Start Num: 7
Candidate Starts for Newrala_101:

(Start: 7 @51007 has 33 MA's),

Gene: Ph8s_99 Start: 51211, Stop: 51125, Start Num: 11

Candidate Starts for Ph8s_99:

(Start: 11 @51211 has 12 MA's),

Gene: Phaeder_99 Start: 51496, Stop: 51413, Start Num: 6

Candidate Starts for Phaeder_99:

(Start: 6 @51496 has 21 MA's), (10, 51484), (12, 51472),

Gene: Phonnegut_99 Start: 51506, Stop: 51423, Start Num: 6

Candidate Starts for Phonnegut_99:

(Start: 6 @51506 has 21 MA's), (12, 51482),

Gene: Pioneer_99 Start: 51506, Stop: 51423, Start Num: 6

Candidate Starts for Pioneer_99:

(Start: 6 @51506 has 21 MA's), (12, 51482),

Gene: Piro94_94 Start: 51139, Stop: 51056, Start Num: 11

Candidate Starts for Piro94_94:

(Start: 2 @51178 has 1 MA's), (3, 51166), (Start: 11 @51139 has 12 MA's), (13, 51070),

Gene: Priamo_100 Start: 50060, Stop: 49980, Start Num: 7

Candidate Starts for Priamo_100:

(Start: 7 @50060 has 33 MA's),

Gene: Priya_96 Start: 51158, Stop: 51075, Start Num: 6

Candidate Starts for Priya_96:

(Start: 6 @51158 has 21 MA's), (12, 51134),

Gene: Qobbit_96 Start: 51120, Stop: 51037, Start Num: 6

Candidate Starts for Qobbit_96:

(Start: 6 @51120 has 21 MA's), (12, 51096),

Gene: Rahalelujah_97 Start: 51017, Stop: 50934, Start Num: 6

Candidate Starts for Rahalelujah_97:

(Start: 2 @51047 has 1 MA's), (Start: 6 @51017 has 21 MA's),

Gene: Refuge_91 Start: 51856, Stop: 51773, Start Num: 11

Candidate Starts for Refuge_91:

(3, 51886), (Start: 11 @51856 has 12 MA's), (14, 51787),

Gene: Rifter_103 Start: 50059, Stop: 49979, Start Num: 7

Candidate Starts for Rifter_103:

(Start: 7 @50059 has 33 MA's),

Gene: Roksolana_105 Start: 51111, Stop: 51031, Start Num: 7

Candidate Starts for Roksolana_105:

(Start: 7 @51111 has 33 MA's),

Gene: Scherzo_97 Start: 51537, Stop: 51454, Start Num: 6

Candidate Starts for Scherzo_97:

(Start: 6 @51537 has 21 MA's), (12, 51513),

Gene: SheaKeira_93 Start: 50757, Stop: 50665, Start Num: 4
Candidate Starts for SheaKeira_93:
(Start: 4 @50757 has 2 MA's),

Gene: SmellyB_102 Start: 50563, Stop: 50483, Start Num: 7
Candidate Starts for SmellyB_102:
(Start: 7 @50563 has 33 MA's),

Gene: SororFago_97 Start: 51754, Stop: 51665, Start Num: 8
Candidate Starts for SororFago_97:
(Start: 8 @51754 has 3 MA's),

Gene: Spouty_96 Start: 51157, Stop: 51074, Start Num: 6
Candidate Starts for Spouty_96:
(Start: 6 @51157 has 21 MA's), (12, 51133),

Gene: SuperAwesome_101 Start: 51056, Stop: 50976, Start Num: 7
Candidate Starts for SuperAwesome_101:
(Start: 7 @51056 has 33 MA's),

Gene: Tubs_99 Start: 51496, Stop: 51413, Start Num: 6
Candidate Starts for Tubs_99:
(Start: 6 @51496 has 21 MA's), (12, 51472),

Gene: Tucker_103 Start: 50654, Stop: 50574, Start Num: 7
Candidate Starts for Tucker_103:
(Start: 7 @50654 has 33 MA's),

Gene: VohminGhazi_102 Start: 50564, Stop: 50484, Start Num: 7
Candidate Starts for VohminGhazi_102:
(Start: 7 @50564 has 33 MA's),

Gene: Wiks_102 Start: 50531, Stop: 50451, Start Num: 7
Candidate Starts for Wiks_102:
(Start: 7 @50531 has 33 MA's),

Gene: WorldCup_96 Start: 51133, Stop: 51020, Start Num: 2
Candidate Starts for WorldCup_96:
(Start: 2 @51133 has 1 MA's), (Start: 6 @51103 has 21 MA's),

Gene: WunderPhul_91 Start: 47133, Stop: 47053, Start Num: 7
Candidate Starts for WunderPhul_91:
(Start: 7 @47133 has 33 MA's),

Gene: Yecey3_101 Start: 51604, Stop: 51491, Start Num: 2
Candidate Starts for Yecey3_101:
(1, 51655), (Start: 2 @51604 has 1 MA's), (5, 51577), (Start: 6 @51574 has 21 MA's),

Gene: Zaka_103 Start: 50531, Stop: 50451, Start Num: 7
Candidate Starts for Zaka_103:
(Start: 7 @50531 has 33 MA's),

Gene: Zimmer_90 Start: 51310, Stop: 51227, Start Num: 11
Candidate Starts for Zimmer_90:
(3, 51340), (Start: 11 @51310 has 12 MA's), (14, 51241),