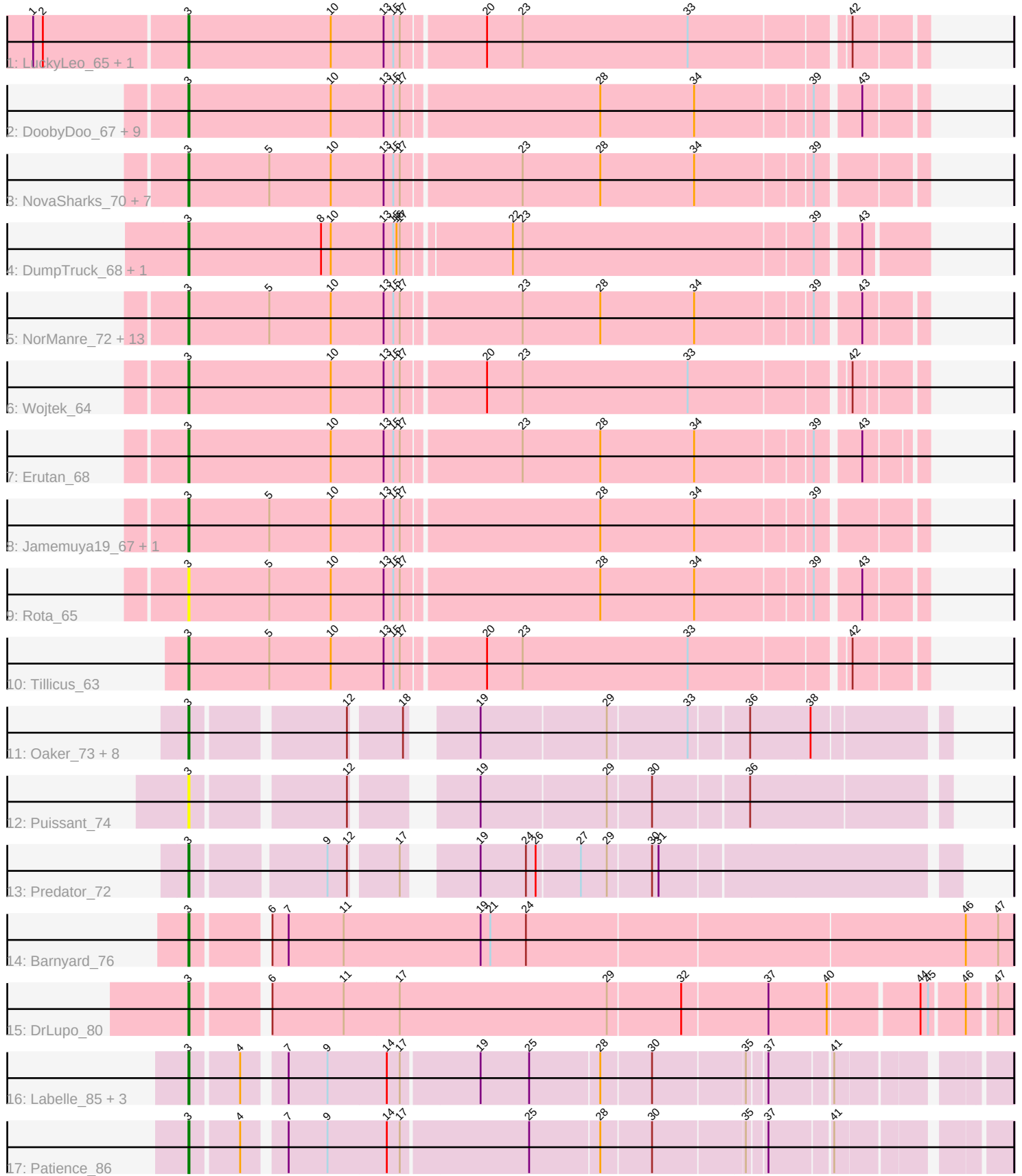


Pham 280467



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 280467 Report

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

Pham number 280467 has 60 members, 9 are drafts.

Phages represented in each track:

- Track 1 : LuckyLeo_65, Apeppi_63
- Track 2 : DoobyDoo_67, MoiGyank_71, Yikes_70, Gretellyn_68, Zany_66, Sampudon_68, Jalebi_67, Sadboi_69, LavAbarElk_68, Mima20_68
- Track 3 : NovaSharks_70, Charminar_68, Stormer_68, Genamy16_71, Alyssamiracle_71, Rumi_69, RazorC_68, Astralis_68
- Track 4 : DumpTruck_68, Xenia2_68
- Track 5 : NorManre_72, ParvusTarda_67, Lila22_69, Ranch_68, BirthdayBoy_70, Gibbin_70, Patos_72, DaviePasture_68, Rukungu_70, Alephilan_69, Fulcrum_68, Lambo_66, GOATification_68, OtterstedtS21_68
- Track 6 : Wojtek_64
- Track 7 : Erutan_68
- Track 8 : Jamemuya19_67, Avian_66
- Track 9 : Rota_65
- Track 10 : Tillicus_63
- Track 11 : Oaker_73, Cborch11_75, Phreeze_72, Damien_73, Beckerton_72, Megatron06_74, Konstantine_77, BobtimousPrime_73, Thumb_74
- Track 12 : Puissant_74
- Track 13 : Predator_72
- Track 14 : Barnyard_76
- Track 15 : DrLupo_80
- Track 16 : Labelle_85, SuperSonics_89, Madrugua_84, Demikore_87
- Track 17 : Patience_86

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

The start number called the most often in the published annotations is 3, it was called in 51 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan_69, Alyssamiracle_71, Apeppi_63, Astralis_68, Avian_66, Barnyard_76, Beckerton_72, BirthdayBoy_70, BobtimousPrime_73, Cborch11_75, Charminar_68, Damien_73, DaviePasture_68, Demikore_87, DoobyDoo_67, DrLupo_80, DumpTruck_68, Erutan_68, Fulcrum_68, GOATification_68, Genamy16_71, Gibbin_70, Gretellyn_68, Jalebi_67, Jamemuya19_67, Konstantine_77, Labelle_85,

Lambo_66, LavAbarElk_68, Lila22_69, LuckyLeo_65, Madrug_84, Megatron06_74, Mima20_68, MoiGyank_71, NorManre_72, NovaSharks_70, Oaker_73, OtterstedtS21_68, ParvusTarda_67, Patience_86, Patos_72, Phreeze_72, Predator_72, Puissant_74, Ranch_68, RazorC_68, Rota_65, Rukungu_70, Rumi_69, Sadboi_69, Sampudon_68, Stormer_68, SuperSonics_89, Thumb_74, Tillicus_63, Wojtek_64, Xenia2_68, Yikes_70, Zany_66,

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

-

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

-

Summary by start number:

Start 3:

- Found in 60 of 60 (100.0%) of genes in pham
- Manual Annotations of this start: 51 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephlan_69 (DV), Alyssamiracle_71 (DV), Apeppi_63 (DV), Astralis_68 (DV), Avian_66 (DV), Barnyard_76 (H2), Beckerton_72 (H1), BirthdayBoy_70 (DV), BobtimousPrime_73 (H1), Cborch11_75 (H1), Charminar_68 (DV), Damien_73 (H1), DaviePasture_68 (DV), Demikore_87 (U), DoobyDoo_67 (DV), DrLupo_80 (H2), DumpTruck_68 (DV), Erutan_68 (DV), Fulcrum_68 (DV), GOATification_68 (DV), Genamy16_71 (DV), Gibbin_70 (DV), GretelLyn_68 (DV), Jalebi_67 (DV), Jamemuya19_67 (DV), Konstantine_77 (H1), Labelle_85 (U), Lambo_66 (DV), LavAbarElk_68 (DV), Lila22_69 (DV), LuckyLeo_65 (DV), Madrug_84 (U), Megatron06_74 (H1), Mima20_68 (DV), MoiGyank_71 (DV), NorManre_72 (DV), NovaSharks_70 (DV), Oaker_73 (H1), OtterstedtS21_68 (DV), ParvusTarda_67 (DV), Patience_86 (U), Patos_72 (DV), Phreeze_72 (H1), Predator_72 (H1), Puissant_74 (H1), Ranch_68 (DV), RazorC_68 (DV), Rota_65 (DV), Rukungu_70 (DV), Rumi_69 (DV), Sadboi_69 (DV), Sampudon_68 (DV), Stormer_68 (DV), SuperSonics_89 (U), Thumb_74 (H1), Tillicus_63 (DV), Wojtek_64 (DV), Xenia2_68 (DV), Yikes_70 (DV), Zany_66 (DV),

Summary by clusters:

There are 4 clusters represented in this pham: DV, H2, H1, U,

Info for manual annotations of cluster DV:

- Start number 3 was manually annotated 37 times for cluster DV.

Info for manual annotations of cluster H1:

- Start number 3 was manually annotated 9 times for cluster H1.

Info for manual annotations of cluster H2:

- Start number 3 was manually annotated 2 times for cluster H2.

Info for manual annotations of cluster U:

- Start number 3 was manually annotated 3 times for cluster U.

Gene Information:

Gene: Alephilan_69 Start: 46737, Stop: 47387, Start Num: 3

Candidate Starts for Alephilan_69:

(Start: 3 @46737 has 51 MA's), (5, 46812), (10, 46869), (13, 46917), (15, 46926), (17, 46932), (23, 47037), (28, 47109), (34, 47196), (39, 47298), (43, 47334),

Gene: Alyssamiracle_71 Start: 45734, Stop: 46384, Start Num: 3

Candidate Starts for Alyssamiracle_71:

(Start: 3 @45734 has 51 MA's), (5, 45809), (10, 45866), (13, 45914), (15, 45923), (17, 45929), (23, 46034), (28, 46106), (34, 46193), (39, 46295),

Gene: Apeppi_63 Start: 45907, Stop: 46557, Start Num: 3

Candidate Starts for Apeppi_63:

(1, 45769), (2, 45778), (Start: 3 @45907 has 51 MA's), (10, 46039), (13, 46087), (15, 46096), (17, 46102), (20, 46174), (23, 46207), (33, 46360), (42, 46495),

Gene: Astralis_68 Start: 45313, Stop: 45963, Start Num: 3

Candidate Starts for Astralis_68:

(Start: 3 @45313 has 51 MA's), (5, 45388), (10, 45445), (13, 45493), (15, 45502), (17, 45508), (23, 45613), (28, 45685), (34, 45772), (39, 45874),

Gene: Avian_66 Start: 45462, Stop: 46112, Start Num: 3

Candidate Starts for Avian_66:

(Start: 3 @45462 has 51 MA's), (5, 45537), (10, 45594), (13, 45642), (15, 45651), (17, 45657), (28, 45834), (34, 45921), (39, 46023),

Gene: Barnyard_76 Start: 52606, Stop: 53343, Start Num: 3

Candidate Starts for Barnyard_76:

(Start: 3 @52606 has 51 MA's), (6, 52666), (7, 52681), (11, 52732), (19, 52858), (21, 52867), (24, 52900), (46, 53299), (47, 53329),

Gene: Beckerton_72 Start: 54217, Stop: 54837, Start Num: 3

Candidate Starts for Beckerton_72:

(Start: 3 @54217 has 51 MA's), (12, 54346), (18, 54388), (19, 54433), (29, 54547), (33, 54619), (36, 54670), (38, 54724),

Gene: BirthdayBoy_70 Start: 47059, Stop: 47709, Start Num: 3

Candidate Starts for BirthdayBoy_70:

(Start: 3 @47059 has 51 MA's), (5, 47134), (10, 47191), (13, 47239), (15, 47248), (17, 47254), (23, 47359), (28, 47431), (34, 47518), (39, 47620), (43, 47656),

Gene: BobtimousPrime_73 Start: 54519, Stop: 55139, Start Num: 3

Candidate Starts for BobtimousPrime_73:

(Start: 3 @54519 has 51 MA's), (12, 54648), (18, 54690), (19, 54735), (29, 54849), (33, 54921), (36, 54972), (38, 55026),

Gene: Cborch11_75 Start: 53763, Stop: 54383, Start Num: 3

Candidate Starts for Cborch11_75:

(Start: 3 @53763 has 51 MA's), (12, 53892), (18, 53934), (19, 53979), (29, 54093), (33, 54165), (36, 54216), (38, 54270),

Gene: Charminar_68 Start: 44970, Stop: 45620, Start Num: 3

Candidate Starts for Charminar_68:

(Start: 3 @44970 has 51 MA's), (5, 45045), (10, 45102), (13, 45150), (15, 45159), (17, 45165), (23, 45270), (28, 45342), (34, 45429), (39, 45531),

Gene: Damien_73 Start: 53725, Stop: 54345, Start Num: 3

Candidate Starts for Damien_73:

(Start: 3 @53725 has 51 MA's), (12, 53854), (18, 53896), (19, 53941), (29, 54055), (33, 54127), (36, 54178), (38, 54232),

Gene: DaviePasture_68 Start: 46646, Stop: 47296, Start Num: 3

Candidate Starts for DaviePasture_68:

(Start: 3 @46646 has 51 MA's), (5, 46721), (10, 46778), (13, 46826), (15, 46835), (17, 46841), (23, 46946), (28, 47018), (34, 47105), (39, 47207), (43, 47243),

Gene: Demikore_87 Start: 55914, Stop: 56600, Start Num: 3

Candidate Starts for Demikore_87:

(Start: 3 @55914 has 51 MA's), (4, 55956), (7, 55989), (9, 56025), (14, 56079), (17, 56091), (19, 56160), (25, 56205), (28, 56268), (30, 56313), (35, 56394), (37, 56409), (41, 56463),

Gene: DoobyDoo_67 Start: 45520, Stop: 46170, Start Num: 3

Candidate Starts for DoobyDoo_67:

(Start: 3 @45520 has 51 MA's), (10, 45652), (13, 45700), (15, 45709), (17, 45715), (28, 45892), (34, 45979), (39, 46081), (43, 46117),

Gene: DrLupo_80 Start: 53815, Stop: 54534, Start Num: 3

Candidate Starts for DrLupo_80:

(Start: 3 @53815 has 51 MA's), (6, 53875), (11, 53941), (17, 53992), (29, 54184), (32, 54250), (37, 54328), (40, 54382), (44, 54460), (45, 54466), (46, 54496), (47, 54520),

Gene: DumpTruck_68 Start: 45709, Stop: 46362, Start Num: 3

Candidate Starts for DumpTruck_68:

(Start: 3 @45709 has 51 MA's), (8, 45832), (10, 45841), (13, 45889), (15, 45898), (16, 45901), (17, 45904), (22, 45997), (23, 46006), (39, 46270), (43, 46306),

Gene: Erutan_68 Start: 46162, Stop: 46809, Start Num: 3

Candidate Starts for Erutan_68:

(Start: 3 @46162 has 51 MA's), (10, 46294), (13, 46342), (15, 46351), (17, 46357), (23, 46462), (28, 46534), (34, 46621), (39, 46723), (43, 46759),

Gene: Fulcrum_68 Start: 46367, Stop: 47017, Start Num: 3

Candidate Starts for Fulcrum_68:

(Start: 3 @46367 has 51 MA's), (5, 46442), (10, 46499), (13, 46547), (15, 46556), (17, 46562), (23, 46667), (28, 46739), (34, 46826), (39, 46928), (43, 46964),

Gene: GOATification_68 Start: 46367, Stop: 47017, Start Num: 3

Candidate Starts for GOATification_68:

(Start: 3 @46367 has 51 MA's), (5, 46442), (10, 46499), (13, 46547), (15, 46556), (17, 46562), (23, 46667), (28, 46739), (34, 46826), (39, 46928), (43, 46964),

Gene: Genamy16_71 Start: 45720, Stop: 46370, Start Num: 3

Candidate Starts for Genamy16_71:

(Start: 3 @45720 has 51 MA's), (5, 45795), (10, 45852), (13, 45900), (15, 45909), (17, 45915), (23, 46020), (28, 46092), (34, 46179), (39, 46281),

Gene: Gibbin_70 Start: 47172, Stop: 47822, Start Num: 3

Candidate Starts for Gibbin_70:

(Start: 3 @47172 has 51 MA's), (5, 47247), (10, 47304), (13, 47352), (15, 47361), (17, 47367), (23, 47472), (28, 47544), (34, 47631), (39, 47733), (43, 47769),

Gene: Gretellyn_68 Start: 47034, Stop: 47684, Start Num: 3

Candidate Starts for Gretellyn_68:

(Start: 3 @47034 has 51 MA's), (10, 47166), (13, 47214), (15, 47223), (17, 47229), (28, 47406), (34, 47493), (39, 47595), (43, 47631),

Gene: Jalebi_67 Start: 47387, Stop: 48037, Start Num: 3

Candidate Starts for Jalebi_67:

(Start: 3 @47387 has 51 MA's), (10, 47519), (13, 47567), (15, 47576), (17, 47582), (28, 47759), (34, 47846), (39, 47948), (43, 47984),

Gene: Jamemuya19_67 Start: 45325, Stop: 45975, Start Num: 3

Candidate Starts for Jamemuya19_67:

(Start: 3 @45325 has 51 MA's), (5, 45400), (10, 45457), (13, 45505), (15, 45514), (17, 45520), (28, 45697), (34, 45784), (39, 45886),

Gene: Konstantine_77 Start: 54556, Stop: 55176, Start Num: 3

Candidate Starts for Konstantine_77:

(Start: 3 @54556 has 51 MA's), (12, 54685), (18, 54727), (19, 54772), (29, 54886), (33, 54958), (36, 55009), (38, 55063),

Gene: Labelle_85 Start: 55748, Stop: 56434, Start Num: 3

Candidate Starts for Labelle_85:

(Start: 3 @55748 has 51 MA's), (4, 55790), (7, 55823), (9, 55859), (14, 55913), (17, 55925), (19, 55994), (25, 56039), (28, 56102), (30, 56147), (35, 56228), (37, 56243), (41, 56297),

Gene: Lambo_66 Start: 46164, Stop: 46814, Start Num: 3

Candidate Starts for Lambo_66:

(Start: 3 @46164 has 51 MA's), (5, 46239), (10, 46296), (13, 46344), (15, 46353), (17, 46359), (23, 46464), (28, 46536), (34, 46623), (39, 46725), (43, 46761),

Gene: LavAbarElk_68 Start: 45974, Stop: 46624, Start Num: 3

Candidate Starts for LavAbarElk_68:

(Start: 3 @45974 has 51 MA's), (10, 46106), (13, 46154), (15, 46163), (17, 46169), (28, 46346), (34, 46433), (39, 46535), (43, 46571),

Gene: Lila22_69 Start: 47116, Stop: 47766, Start Num: 3

Candidate Starts for Lila22_69:

(Start: 3 @47116 has 51 MA's), (5, 47191), (10, 47248), (13, 47296), (15, 47305), (17, 47311), (23, 47416), (28, 47488), (34, 47575), (39, 47677), (43, 47713),

Gene: LuckyLeo_65 Start: 45907, Stop: 46557, Start Num: 3

Candidate Starts for LuckyLeo_65:

(1, 45769), (2, 45778), (Start: 3 @45907 has 51 MA's), (10, 46039), (13, 46087), (15, 46096), (17, 46102), (20, 46174), (23, 46207), (33, 46360), (42, 46495),

Gene: Madruga_84 Start: 55702, Stop: 56388, Start Num: 3

Candidate Starts for Madruga_84:

(Start: 3 @55702 has 51 MA's), (4, 55744), (7, 55777), (9, 55813), (14, 55867), (17, 55879), (19, 55948), (25, 55993), (28, 56056), (30, 56101), (35, 56182), (37, 56197), (41, 56251),

Gene: Megatron06_74 Start: 54299, Stop: 54919, Start Num: 3

Candidate Starts for Megatron06_74:

(Start: 3 @54299 has 51 MA's), (12, 54428), (18, 54470), (19, 54515), (29, 54629), (33, 54701), (36, 54752), (38, 54806),

Gene: Mima20_68 Start: 46550, Stop: 47200, Start Num: 3

Candidate Starts for Mima20_68:

(Start: 3 @46550 has 51 MA's), (10, 46682), (13, 46730), (15, 46739), (17, 46745), (28, 46922), (34, 47009), (39, 47111), (43, 47147),

Gene: MoiGyank_71 Start: 47315, Stop: 47965, Start Num: 3

Candidate Starts for MoiGyank_71:

(Start: 3 @47315 has 51 MA's), (10, 47447), (13, 47495), (15, 47504), (17, 47510), (28, 47687), (34, 47774), (39, 47876), (43, 47912),

Gene: NorManre_72 Start: 47564, Stop: 48214, Start Num: 3

Candidate Starts for NorManre_72:

(Start: 3 @47564 has 51 MA's), (5, 47639), (10, 47696), (13, 47744), (15, 47753), (17, 47759), (23, 47864), (28, 47936), (34, 48023), (39, 48125), (43, 48161),

Gene: NovaSharks_70 Start: 45311, Stop: 45961, Start Num: 3

Candidate Starts for NovaSharks_70:

(Start: 3 @45311 has 51 MA's), (5, 45386), (10, 45443), (13, 45491), (15, 45500), (17, 45506), (23, 45611), (28, 45683), (34, 45770), (39, 45872),

Gene: Oaker_73 Start: 54328, Stop: 54948, Start Num: 3

Candidate Starts for Oaker_73:

(Start: 3 @54328 has 51 MA's), (12, 54457), (18, 54499), (19, 54544), (29, 54658), (33, 54730), (36, 54781), (38, 54835),

Gene: OtterstedtS21_68 Start: 46498, Stop: 47148, Start Num: 3

Candidate Starts for OtterstedtS21_68:

(Start: 3 @46498 has 51 MA's), (5, 46573), (10, 46630), (13, 46678), (15, 46687), (17, 46693), (23, 46798), (28, 46870), (34, 46957), (39, 47059), (43, 47095),

Gene: ParvusTarda_67 Start: 45870, Stop: 46520, Start Num: 3

Candidate Starts for ParvusTarda_67:

(Start: 3 @45870 has 51 MA's), (5, 45945), (10, 46002), (13, 46050), (15, 46059), (17, 46065), (23, 46170), (28, 46242), (34, 46329), (39, 46431), (43, 46467),

Gene: Patience_86 Start: 56615, Stop: 57301, Start Num: 3

Candidate Starts for Patience_86:

(Start: 3 @56615 has 51 MA's), (4, 56657), (7, 56690), (9, 56726), (14, 56780), (17, 56792), (25, 56906), (28, 56969), (30, 57014), (35, 57095), (37, 57110), (41, 57164),

Gene: Patos_72 Start: 47563, Stop: 48213, Start Num: 3

Candidate Starts for Patos_72:

(Start: 3 @47563 has 51 MA's), (5, 47638), (10, 47695), (13, 47743), (15, 47752), (17, 47758), (23, 47863), (28, 47935), (34, 48022), (39, 48124), (43, 48160),

Gene: Phreeze_72 Start: 53298, Stop: 53918, Start Num: 3

Candidate Starts for Phreeze_72:

(Start: 3 @53298 has 51 MA's), (12, 53427), (18, 53469), (19, 53514), (29, 53628), (33, 53700), (36, 53751), (38, 53805),

Gene: Predator_72 Start: 52784, Stop: 53422, Start Num: 3

Candidate Starts for Predator_72:

(Start: 3 @52784 has 51 MA's), (9, 52898), (12, 52916), (17, 52955), (19, 53003), (24, 53045), (26, 53054), (27, 53093), (29, 53117), (30, 53156), (31, 53162),

Gene: Puissant_74 Start: 53461, Stop: 54084, Start Num: 3

Candidate Starts for Puissant_74:

(Start: 3 @53461 has 51 MA's), (12, 53590), (19, 53677), (29, 53791), (30, 53830), (36, 53914),

Gene: Ranch_68 Start: 45342, Stop: 45992, Start Num: 3

Candidate Starts for Ranch_68:

(Start: 3 @45342 has 51 MA's), (5, 45417), (10, 45474), (13, 45522), (15, 45531), (17, 45537), (23, 45642), (28, 45714), (34, 45801), (39, 45903), (43, 45939),

Gene: RazorC_68 Start: 45465, Stop: 46115, Start Num: 3

Candidate Starts for RazorC_68:

(Start: 3 @45465 has 51 MA's), (5, 45540), (10, 45597), (13, 45645), (15, 45654), (17, 45660), (23, 45765), (28, 45837), (34, 45924), (39, 46026),

Gene: Rota_65 Start: 46233, Stop: 46883, Start Num: 3

Candidate Starts for Rota_65:

(Start: 3 @46233 has 51 MA's), (5, 46308), (10, 46365), (13, 46413), (15, 46422), (17, 46428), (28, 46605), (34, 46692), (39, 46794), (43, 46830),

Gene: Rukungu_70 Start: 47455, Stop: 48105, Start Num: 3

Candidate Starts for Rukungu_70:

(Start: 3 @47455 has 51 MA's), (5, 47530), (10, 47587), (13, 47635), (15, 47644), (17, 47650), (23, 47755), (28, 47827), (34, 47914), (39, 48016), (43, 48052),

Gene: Rumi_69 Start: 45008, Stop: 45658, Start Num: 3

Candidate Starts for Rumi_69:

(Start: 3 @45008 has 51 MA's), (5, 45083), (10, 45140), (13, 45188), (15, 45197), (17, 45203), (23, 45308), (28, 45380), (34, 45467), (39, 45569),

Gene: Sadboi_69 Start: 47035, Stop: 47685, Start Num: 3

Candidate Starts for Sadboi_69:

(Start: 3 @47035 has 51 MA's), (10, 47167), (13, 47215), (15, 47224), (17, 47230), (28, 47407), (34, 47494), (39, 47596), (43, 47632),

Gene: Sampudon_68 Start: 47387, Stop: 48037, Start Num: 3

Candidate Starts for Sampudon_68:

(Start: 3 @47387 has 51 MA's), (10, 47519), (13, 47567), (15, 47576), (17, 47582), (28, 47759), (34, 47846), (39, 47948), (43, 47984),

Gene: Stormer_68 Start: 45012, Stop: 45662, Start Num: 3

Candidate Starts for Stormer_68:

(Start: 3 @45012 has 51 MA's), (5, 45087), (10, 45144), (13, 45192), (15, 45201), (17, 45207), (23, 45312), (28, 45384), (34, 45471), (39, 45573),

Gene: SuperSonics_89 Start: 55670, Stop: 56356, Start Num: 3

Candidate Starts for SuperSonics_89:

(Start: 3 @55670 has 51 MA's), (4, 55712), (7, 55745), (9, 55781), (14, 55835), (17, 55847), (19, 55916), (25, 55961), (28, 56024), (30, 56069), (35, 56150), (37, 56165), (41, 56219),

Gene: Thumb_74 Start: 53733, Stop: 54350, Start Num: 3

Candidate Starts for Thumb_74:

(Start: 3 @53733 has 51 MA's), (12, 53862), (18, 53904), (19, 53949), (29, 54063), (33, 54135), (36, 54186), (38, 54237),

Gene: Tillicus_63 Start: 45848, Stop: 46498, Start Num: 3

Candidate Starts for Tillicus_63:

(Start: 3 @45848 has 51 MA's), (5, 45923), (10, 45980), (13, 46028), (15, 46037), (17, 46043), (20, 46115), (23, 46148), (33, 46301), (42, 46436),

Gene: Wojtek_64 Start: 45592, Stop: 46239, Start Num: 3

Candidate Starts for Wojtek_64:

(Start: 3 @45592 has 51 MA's), (10, 45724), (13, 45772), (15, 45781), (17, 45787), (20, 45859), (23, 45892), (33, 46045), (42, 46180),

Gene: Xenia2_68 Start: 45594, Stop: 46247, Start Num: 3

Candidate Starts for Xenia2_68:

(Start: 3 @45594 has 51 MA's), (8, 45717), (10, 45726), (13, 45774), (15, 45783), (16, 45786), (17, 45789), (22, 45882), (23, 45891), (39, 46155), (43, 46191),

Gene: Yikes_70 Start: 47481, Stop: 48131, Start Num: 3

Candidate Starts for Yikes_70:

(Start: 3 @47481 has 51 MA's), (10, 47613), (13, 47661), (15, 47670), (17, 47676), (28, 47853), (34, 47940), (39, 48042), (43, 48078),

Gene: Zany_66 Start: 47075, Stop: 47725, Start Num: 3

Candidate Starts for Zany_66:

(Start: 3 @47075 has 51 MA's), (10, 47207), (13, 47255), (15, 47264), (17, 47270), (28, 47447), (34, 47534), (39, 47636), (43, 47672),