



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 308269 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308269 has 126 members, 11 are drafts.

Phages represented in each track:

- Track 1 : PhesterPhotato_101, Seagreen_98, Ms6_99, DillTech15_103, Phatniss_95, Emma_102, Dante_95
- Track 2 : JalFarm20_106, DosHalletts_94, Donkeykong_103, Okabe_89, Llij_92, Bipolar_99, OwlsT2W_95, SuperGrey_97
- Track 3 : Wachhund_94
- Track 4 : ArcusAngelus_97, Chevrolet_101
- Track 5 : Guppsters_92, Tchotchke_90, Flathead_99, Hlubikazi_95, DeadP_97, Mandlovu_95, Medindi_102, Tootsieroll_91, Jant_104, Moonbeam_100, MilanaBonita_90, Peridot_100, Hamulus_97, Sabbb_100, Phalconet_98, Ardmore_81, Squirty_96, MilleniumForce_97, Jinglebell_104, LittleShirley_105, StAnnes_101, Alexphander_98, Whatsapiecost_91, DLane_97, Strokeseat_95, Slim_100, Taj_103, Totinger_100, Firehouse51_91, SassyB_88, Melissauren88_87, Emmaloid_100, Filuzino_97, PopTart_88, XFactor_88, Beakin_89, Starcevich_99, Wee_100, Rialto_102, Akhila_91
- Track 6 : AlpineSix_95, Llama_104, Eish_102, Ochi17_103, Seabastian_104, DoRead_98, Harley_99, Nichirin_97, Grimmer_105, OfUltron_104, Ibhubesi_94, Ovechkin_100, Modragons_101, Violac_98, Byougenkin_94
- Track 7 : LilMoolah_100, ShowerHandel_98, Gorge_96, Nivrat_97, Brocalys_89, Clifton_89, Latretium_100, Mattes_98, Jennelsea_94, LastJedi_88, BobaPhett_99, Minnie_92, Crumble_92, ByChance_88, ShiLan_100, Pippy_95, Yorick_93, Cabrinians_94, Burwell21_91, Vivum_97, Spoonbill_97, Jarcob_100, Whouxphf_101, Sandalphon_97, Lizziana_98, FreddyB_107, NormanBulbieJr_95, James_101, Maravista_94, Saal_95, OlympiaSaint_101, Koella_90, Martik_96, SwagPiggett_99, Zizzle_100, Priscilla_98, Blexus_94
- Track 8 : Kenuha5_89, Zerg_95, Mozy_101, EleanorGeorge_101
- Track 9 : Bubbles123_91, PhlipPhlop_87, EmiMonkey_86, Mutaforma13_98
- Track 10 : Plumbus_96
- Track 11 : Kersh_100
- Track 12 : DRBy19_97, TDanisky_105, Sparkdehlily_104
- Track 13 : Eradicator_89
- Track 14 : CaptainTrips_99
- Track 15 : MinionDave_95

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

The start number called the most often in the published annotations is 4, it was called in 97 of the 115 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_91, Alexphander_98, ArcusAngelus_97, Ardmore_81, Beakin_89, Bipolar_99, Blexus_94, BobaPhett_99, Brocalys_89, Bubbles123_91, Burwell21_91, ByChance_88, Cabrinians_94, CaptainTrips_99, Chevrolet_101, Clifton_89, Crumble_92, DLane_97, Dante_95, DeadP_97, DillTech15_103, Donkeykong_103, DosHalletts_94, EleanorGeorge_101, EmiMonkey_86, Emma_102, Emmaloid_100, Eradicator_89, Filuzino_97, Firehouse51_91, Flathead_99, FreddyB_107, Gorge_96, Guppsters_92, Hamulus_97, Hlubikazi_95, JalFarm20_106, James_101, Jant_104, Jarcob_100, Jennelsea_94, Jinglebell_104, Kenuha5_89, Koella_90, LastJedi_88, Latretium_100, LilMoolah_100, LittleShirley_105, Lizziana_98, Lij_92, Mandlovu_95, Maravista_94, Martik_96, Mattes_98, Medindi_102, Melissauren88_87, MilanaBonita_90, MilleniumForce_97, MinionDave_95, Minnie_92, Moonbeam_100, Mozy_101, Ms6_99, Mutaforma13_98, Nivrat_97, NormanBulbieJr_95, Okabe_89, OlympiaSaint_101, OwlsT2W_95, Peridot_100, Phalconet_98, Phatniss_95, PhesterPhotato_101, PhilipPhlop_87, Pippy_95, PopTart_88, Priscilla_98, Rialto_102, Saal_95, Sabbb_100, Sandalphon_97, SassyB_88, Seagreen_98, ShiLan_100, ShowerHandel_98, Slim_100, Spoonbill_97, Squirty_96, StAnnes_101, Starcevich_99, Strokeseat_95, SuperGrey_97, SwagPiggett_99, Taj_103, Tchotchke_90, Tootsieroll_91, Totinger_100, Vivum_97, Wachhund_94, Wee_100, Whatsapiecost_91, Whouxphf_101, XFactor_88, Yorick_93, Zerg_95, Zizzle_100,

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

-

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

- AlpineSix_95, Byougenkin_94, DRBy19_97, DoRead_98, Eish_102, Grimmer_105, Harley_99, Ibhuesi_94, Kersh_100, Llama_104, Modragons_101, Nichirin_97, Ochi17_103, OfUltron_104, Ovechkin_100, Plumbus_96, Seabastian_104, Sparkdehlily_104, TDanisky_105, Violac_98,

Summary by start number:

Start 2:

- Found in 3 of 126 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DRBy19_97 (F1), Sparkdehlily_104 (F1), TDanisky_105 (F1),

Start 3:

- Found in 17 of 126 (13.5%) of genes in pham
- Manual Annotations of this start: 15 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlpineSix_95 (F1), Byougenkin_94 (F1), DoRead_98 (F1), Eish_102 (F1), Grimmer_105 (F1), Harley_99 (F1), Ibhuesi_94 (F1), Kersh_100 (F1), Llama_104 (F1), Modragons_101 (F1), Nichirin_97 (F1), Ochi17_103 (F1), OfUltron_104 (F1), Ovechkin_100 (F1), Plumbus_96 (F1), Seabastian_104 (F1), Violac_98 (F1),

Start 4:

- Found in 106 of 126 (84.1%) of genes in pham
- Manual Annotations of this start: 97 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akhila_91 (F1), Alexphander_98 (F1), ArcusAngelus_97 (F1), Ardmore_81 (F1), Beakin_89 (F1), Bipolar_99 (F1), Blexus_94 (F1), BobaPhett_99 (F1), Brocalys_89 (F1), Bubbles123_91 (F1), Burwell21_91 (F1), ByChance_88 (F1), Cabrinians_94 (F1), CaptainTrips_99 (F1), Chevrolet_101 (F1), Clifton_89 (F1), Crumble_92 (F1), DLane_97 (F1), Dante_95 (F1), DeadP_97 (F1), DillTech15_103 (F1), Donkeykong_103 (F1), DosHalletts_94 (F1), EleanorGeorge_101 (F1), EmiMonkey_86 (F1), Emma_102 (F1), Emmaloid_100 (F1), Eradicator_89 (F1), Filuzino_97 (F1), Firehouse51_91 (F1), Flathead_99 (F1), FreddyB_107 (F1), Gorge_96 (F1), Guppsters_92 (F1), Hamulus_97 (F1), Hlubikazi_95 (F1), JalFarm20_106 (F1), James_101 (F1), Jant_104 (F1), Jarcob_100 (F1), Jennelsea_94 (F1), Jinglebell_104 (F1), Kenuha5_89 (F1), Koella_90 (F1), LastJedi_88 (F1), Latretium_100 (F1), LilMoolah_100 (F1), LittleShirley_105 (F1), Lizziana_98 (F1), Llij_92 (F1), Mandlovu_95 (F1), Maravista_94 (F1), Martik_96 (F1), Mattes_98 (F1), Medindi_102 (F1), Melissauren88_87 (F1), MilanaBonita_90 (F1), MilleniumForce_97 (F1), MinionDave_95 (F1), Minnie_92 (F1), Moonbeam_100 (F1), Mozy_101 (F1), Ms6_99 (F1), Mutaforma13_98 (F1), Nivrat_97 (F1), NormanBulbieJr_95 (F1), Okabe_89 (F8), OlympiaSaint_101 (F1), OwlsT2W_95 (F1), Peridot_100 (F1), Phalconet_98 (F1), Phatniss_95 (F1), PhesterPhotato_101 (F1), PhilipPhlop_87 (F1), Pippy_95 (F1), PopTart_88 (F1), Priscilla_98 (F1), Rialto_102 (F1), Saal_95 (F1), Sabbb_100 (F1), Sandalphon_97 (F1), SassyB_88 (F1), Seagreen_98 (F1), ShiLan_100 (F1), ShowerHandel_98 (F1), Slim_100 (F1), Spoonbill_97 (F1), Squirty_96 (F3), StAnnes_101 (F1), Starcevic_99 (F1), Strokeseat_95 (F1), SuperGrey_97 (F1), SwagPiggett_99 (F1), Taj_103 (F1), Tchotchke_90 (F1), Tootsieroll_91 (F1), Totinger_100 (F1), Vivum_97 (F1), Wachhund_94 (F1), Wee_100 (F1), Whatsapiecost_91 (F1), Whouxphf_101 (F1), XFactor_88 (F1), Yorick_93 (F1), Zerg_95 (F1), Zizzle_100 (F1),

Summary by clusters:

There are 3 clusters represented in this pham: F8, F1, F3,

Info for manual annotations of cluster F1:

- Start number 2 was manually annotated 3 times for cluster F1.
- Start number 3 was manually annotated 15 times for cluster F1.
- Start number 4 was manually annotated 96 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 4 was manually annotated 1 time for cluster F3.

Gene Information:

Gene: Akhila_91 Start: 52025, Stop: 52222, Start Num: 4

Candidate Starts for Akhila_91:

(Start: 4 @52025 has 97 MA's),

Gene: Alexphander_98 Start: 54359, Stop: 54556, Start Num: 4

Candidate Starts for Alexphander_98:

(Start: 4 @54359 has 97 MA's),

Gene: AlpineSix_95 Start: 52740, Stop: 52940, Start Num: 3

Candidate Starts for AlpineSix_95:

(Start: 3 @52740 has 15 MA's), (6, 52755), (7, 52761), (9, 52857),

Gene: ArcusAngelus_97 Start: 54276, Stop: 54473, Start Num: 4

Candidate Starts for ArcusAngelus_97:

(Start: 4 @54276 has 97 MA's),

Gene: Ardmore_81 Start: 47914, Stop: 48111, Start Num: 4

Candidate Starts for Ardmore_81:

(Start: 4 @47914 has 97 MA's),

Gene: Beakin_89 Start: 50437, Stop: 50634, Start Num: 4

Candidate Starts for Beakin_89:

(Start: 4 @50437 has 97 MA's),

Gene: Bipolar_99 Start: 55233, Stop: 55430, Start Num: 4

Candidate Starts for Bipolar_99:

(Start: 4 @55233 has 97 MA's),

Gene: Blexus_94 Start: 53837, Stop: 54037, Start Num: 4

Candidate Starts for Blexus_94:

(1, 53792), (Start: 4 @53837 has 97 MA's), (7, 53858), (9, 53954),

Gene: BobaPhett_99 Start: 55519, Stop: 55719, Start Num: 4

Candidate Starts for BobaPhett_99:

(1, 55474), (Start: 4 @55519 has 97 MA's), (7, 55540), (9, 55636),

Gene: Brocalys_89 Start: 50998, Stop: 51198, Start Num: 4

Candidate Starts for Brocalys_89:

(1, 50953), (Start: 4 @50998 has 97 MA's), (7, 51019), (9, 51115),

Gene: Bubbles123_91 Start: 53273, Stop: 53473, Start Num: 4

Candidate Starts for Bubbles123_91:

(Start: 4 @53273 has 97 MA's), (9, 53390),

Gene: Burwell21_91 Start: 53284, Stop: 53484, Start Num: 4

Candidate Starts for Burwell21_91:

(1, 53239), (Start: 4 @53284 has 97 MA's), (7, 53305), (9, 53401),

Gene: ByChance_88 Start: 49356, Stop: 49556, Start Num: 4

Candidate Starts for ByChance_88:

(1, 49311), (Start: 4 @49356 has 97 MA's), (7, 49377), (9, 49473),

Gene: Byougenkin_94 Start: 50320, Stop: 50520, Start Num: 3

Candidate Starts for Byougenkin_94:

(Start: 3 @50320 has 15 MA's), (6, 50335), (7, 50341), (9, 50437),

Gene: Cabrinians_94 Start: 52919, Stop: 53119, Start Num: 4

Candidate Starts for Cabrinians_94:

(1, 52874), (Start: 4 @52919 has 97 MA's), (7, 52940), (9, 53036),

Gene: CaptainTrips_99 Start: 53102, Stop: 53299, Start Num: 4
Candidate Starts for CaptainTrips_99:
(Start: 4 @53102 has 97 MA's), (7, 53123),

Gene: Chevrolet_101 Start: 54277, Stop: 54474, Start Num: 4
Candidate Starts for Chevrolet_101:
(Start: 4 @54277 has 97 MA's),

Gene: Clifton_89 Start: 51973, Stop: 52173, Start Num: 4
Candidate Starts for Clifton_89:
(1, 51928), (Start: 4 @51973 has 97 MA's), (7, 51994), (9, 52090),

Gene: Crumble_92 Start: 49643, Stop: 49843, Start Num: 4
Candidate Starts for Crumble_92:
(1, 49598), (Start: 4 @49643 has 97 MA's), (7, 49664), (9, 49760),

Gene: DLane_97 Start: 54384, Stop: 54581, Start Num: 4
Candidate Starts for DLane_97:
(Start: 4 @54384 has 97 MA's),

Gene: DRBy19_97 Start: 54594, Stop: 54800, Start Num: 2
Candidate Starts for DRBy19_97:
(Start: 2 @54594 has 3 MA's), (6, 54615), (7, 54621), (9, 54717),

Gene: Dante_95 Start: 54734, Stop: 54931, Start Num: 4
Candidate Starts for Dante_95:
(Start: 4 @54734 has 97 MA's), (9, 54848),

Gene: DeadP_97 Start: 51962, Stop: 52159, Start Num: 4
Candidate Starts for DeadP_97:
(Start: 4 @51962 has 97 MA's),

Gene: DillTech15_103 Start: 53559, Stop: 53756, Start Num: 4
Candidate Starts for DillTech15_103:
(Start: 4 @53559 has 97 MA's), (9, 53673),

Gene: DoRead_98 Start: 51408, Stop: 51608, Start Num: 3
Candidate Starts for DoRead_98:
(Start: 3 @51408 has 15 MA's), (6, 51423), (7, 51429), (9, 51525),

Gene: Donkeykong_103 Start: 55719, Stop: 55916, Start Num: 4
Candidate Starts for Donkeykong_103:
(Start: 4 @55719 has 97 MA's),

Gene: DosHalletts_94 Start: 53724, Stop: 53921, Start Num: 4
Candidate Starts for DosHalletts_94:
(Start: 4 @53724 has 97 MA's),

Gene: Eish_102 Start: 54397, Stop: 54597, Start Num: 3
Candidate Starts for Eish_102:
(Start: 3 @54397 has 15 MA's), (6, 54412), (7, 54418), (9, 54514),

Gene: EleanorGeorge_101 Start: 55664, Stop: 55864, Start Num: 4
Candidate Starts for EleanorGeorge_101:
(Start: 4 @55664 has 97 MA's), (5, 55670), (7, 55685),

Gene: EmiMonkey_86 Start: 54831, Stop: 55031, Start Num: 4
Candidate Starts for EmiMonkey_86:
(Start: 4 @54831 has 97 MA's), (9, 54948),

Gene: Emma_102 Start: 52668, Stop: 52865, Start Num: 4
Candidate Starts for Emma_102:
(Start: 4 @52668 has 97 MA's), (9, 52782),

Gene: Emmaloid_100 Start: 53588, Stop: 53785, Start Num: 4
Candidate Starts for Emmaloid_100:
(Start: 4 @53588 has 97 MA's),

Gene: Eradicator_89 Start: 51936, Stop: 52136, Start Num: 4
Candidate Starts for Eradicator_89:
(Start: 4 @51936 has 97 MA's), (8, 52014), (9, 52053),

Gene: Filuzino_97 Start: 55079, Stop: 55276, Start Num: 4
Candidate Starts for Filuzino_97:
(Start: 4 @55079 has 97 MA's),

Gene: Firehouse51_91 Start: 53896, Stop: 54093, Start Num: 4
Candidate Starts for Firehouse51_91:
(Start: 4 @53896 has 97 MA's),

Gene: Flathead_99 Start: 53400, Stop: 53597, Start Num: 4
Candidate Starts for Flathead_99:
(Start: 4 @53400 has 97 MA's),

Gene: FreddyB_107 Start: 54565, Stop: 54765, Start Num: 4
Candidate Starts for FreddyB_107:
(1, 54520), (Start: 4 @54565 has 97 MA's), (7, 54586), (9, 54682),

Gene: Gorge_96 Start: 54192, Stop: 54392, Start Num: 4
Candidate Starts for Gorge_96:
(1, 54147), (Start: 4 @54192 has 97 MA's), (7, 54213), (9, 54309),

Gene: Grimmer_105 Start: 53549, Stop: 53749, Start Num: 3
Candidate Starts for Grimmer_105:
(Start: 3 @53549 has 15 MA's), (6, 53564), (7, 53570), (9, 53666),

Gene: Guppsters_92 Start: 51085, Stop: 51282, Start Num: 4
Candidate Starts for Guppsters_92:
(Start: 4 @51085 has 97 MA's),

Gene: Hamulus_97 Start: 52929, Stop: 53126, Start Num: 4
Candidate Starts for Hamulus_97:
(Start: 4 @52929 has 97 MA's),

Gene: Harley_99 Start: 54098, Stop: 54298, Start Num: 3
Candidate Starts for Harley_99:
(Start: 3 @54098 has 15 MA's), (6, 54113), (7, 54119), (9, 54215),

Gene: Hlubikazi_95 Start: 51708, Stop: 51905, Start Num: 4
Candidate Starts for Hlubikazi_95:
(Start: 4 @51708 has 97 MA's),

Gene: Ibhubesi_94 Start: 50967, Stop: 51167, Start Num: 3
Candidate Starts for Ibhubesi_94:
(Start: 3 @50967 has 15 MA's), (6, 50982), (7, 50988), (9, 51084),

Gene: JalFarm20_106 Start: 55406, Stop: 55603, Start Num: 4
Candidate Starts for JalFarm20_106:
(Start: 4 @55406 has 97 MA's),

Gene: James_101 Start: 55574, Stop: 55774, Start Num: 4
Candidate Starts for James_101:
(1, 55529), (Start: 4 @55574 has 97 MA's), (7, 55595), (9, 55691),

Gene: Jant_104 Start: 52892, Stop: 53089, Start Num: 4
Candidate Starts for Jant_104:
(Start: 4 @52892 has 97 MA's),

Gene: Jacob_100 Start: 55173, Stop: 55373, Start Num: 4
Candidate Starts for Jacob_100:
(1, 55128), (Start: 4 @55173 has 97 MA's), (7, 55194), (9, 55290),

Gene: Jennelsea_94 Start: 52474, Stop: 52674, Start Num: 4
Candidate Starts for Jennelsea_94:
(1, 52429), (Start: 4 @52474 has 97 MA's), (7, 52495), (9, 52591),

Gene: Jinglebell_104 Start: 54853, Stop: 55050, Start Num: 4
Candidate Starts for Jinglebell_104:
(Start: 4 @54853 has 97 MA's),

Gene: Kenuha5_89 Start: 52750, Stop: 52950, Start Num: 4
Candidate Starts for Kenuha5_89:
(Start: 4 @52750 has 97 MA's), (5, 52756), (7, 52771),

Gene: Kersh_100 Start: 55919, Stop: 56119, Start Num: 3
Candidate Starts for Kersh_100:
(Start: 3 @55919 has 15 MA's), (6, 55934), (7, 55940), (9, 56036),

Gene: Koella_90 Start: 50336, Stop: 50536, Start Num: 4
Candidate Starts for Koella_90:
(1, 50291), (Start: 4 @50336 has 97 MA's), (7, 50357), (9, 50453),

Gene: LastJedi_88 Start: 51393, Stop: 51593, Start Num: 4
Candidate Starts for LastJedi_88:
(1, 51348), (Start: 4 @51393 has 97 MA's), (7, 51414), (9, 51510),

Gene: Latretium_100 Start: 54439, Stop: 54639, Start Num: 4

Candidate Starts for Latretium_100:
(1, 54394), (Start: 4 @54439 has 97 MA's), (7, 54460), (9, 54556),

Gene: LilMoolah_100 Start: 54373, Stop: 54573, Start Num: 4
Candidate Starts for LilMoolah_100:
(1, 54328), (Start: 4 @54373 has 97 MA's), (7, 54394), (9, 54490),

Gene: LittleShirley_105 Start: 54773, Stop: 54970, Start Num: 4
Candidate Starts for LittleShirley_105:
(Start: 4 @54773 has 97 MA's),

Gene: Lizziana_98 Start: 54641, Stop: 54841, Start Num: 4
Candidate Starts for Lizziana_98:
(1, 54596), (Start: 4 @54641 has 97 MA's), (7, 54662), (9, 54758),

Gene: Llama_104 Start: 54493, Stop: 54693, Start Num: 3
Candidate Starts for Llama_104:
(Start: 3 @54493 has 15 MA's), (6, 54508), (7, 54514), (9, 54610),

Gene: Llij_92 Start: 52327, Stop: 52524, Start Num: 4
Candidate Starts for Llij_92:
(Start: 4 @52327 has 97 MA's),

Gene: Mandlovu_95 Start: 51650, Stop: 51847, Start Num: 4
Candidate Starts for Mandlovu_95:
(Start: 4 @51650 has 97 MA's),

Gene: Maravista_94 Start: 55301, Stop: 55501, Start Num: 4
Candidate Starts for Maravista_94:
(1, 55256), (Start: 4 @55301 has 97 MA's), (7, 55322), (9, 55418),

Gene: Martik_96 Start: 55104, Stop: 55304, Start Num: 4
Candidate Starts for Martik_96:
(1, 55059), (Start: 4 @55104 has 97 MA's), (7, 55125), (9, 55221),

Gene: Mattes_98 Start: 54310, Stop: 54510, Start Num: 4
Candidate Starts for Mattes_98:
(1, 54265), (Start: 4 @54310 has 97 MA's), (7, 54331), (9, 54427),

Gene: Medindi_102 Start: 54455, Stop: 54652, Start Num: 4
Candidate Starts for Medindi_102:
(Start: 4 @54455 has 97 MA's),

Gene: Melissauren88_87 Start: 50129, Stop: 50326, Start Num: 4
Candidate Starts for Melissauren88_87:
(Start: 4 @50129 has 97 MA's),

Gene: MilanaBonita_90 Start: 52025, Stop: 52222, Start Num: 4
Candidate Starts for MilanaBonita_90:
(Start: 4 @52025 has 97 MA's),

Gene: MilleniumForce_97 Start: 53856, Stop: 54029, Start Num: 4
Candidate Starts for MilleniumForce_97:

(Start: 4 @53856 has 97 MA's),

Gene: MinionDave_95 Start: 53731, Stop: 53931, Start Num: 4

Candidate Starts for MinionDave_95:

(Start: 4 @53731 has 97 MA's), (5, 53737), (7, 53752),

Gene: Minnie_92 Start: 54722, Stop: 54922, Start Num: 4

Candidate Starts for Minnie_92:

(1, 54677), (Start: 4 @54722 has 97 MA's), (7, 54743), (9, 54839),

Gene: Modragons_101 Start: 54481, Stop: 54681, Start Num: 3

Candidate Starts for Modragons_101:

(Start: 3 @54481 has 15 MA's), (6, 54496), (7, 54502), (9, 54598),

Gene: Moonbeam_100 Start: 54220, Stop: 54417, Start Num: 4

Candidate Starts for Moonbeam_100:

(Start: 4 @54220 has 97 MA's),

Gene: Mozy_101 Start: 53394, Stop: 53594, Start Num: 4

Candidate Starts for Mozy_101:

(Start: 4 @53394 has 97 MA's), (5, 53400), (7, 53415),

Gene: Ms6_99 Start: 50020, Stop: 50217, Start Num: 4

Candidate Starts for Ms6_99:

(Start: 4 @50020 has 97 MA's), (9, 50134),

Gene: Mutaforma13_98 Start: 52955, Stop: 53155, Start Num: 4

Candidate Starts for Mutaforma13_98:

(Start: 4 @52955 has 97 MA's), (9, 53072),

Gene: Nichirin_97 Start: 54336, Stop: 54536, Start Num: 3

Candidate Starts for Nichirin_97:

(Start: 3 @54336 has 15 MA's), (6, 54351), (7, 54357), (9, 54453),

Gene: Nivrat_97 Start: 54246, Stop: 54446, Start Num: 4

Candidate Starts for Nivrat_97:

(1, 54201), (Start: 4 @54246 has 97 MA's), (7, 54267), (9, 54363),

Gene: NormanBulbieJr_95 Start: 54350, Stop: 54550, Start Num: 4

Candidate Starts for NormanBulbieJr_95:

(1, 54305), (Start: 4 @54350 has 97 MA's), (7, 54371), (9, 54467),

Gene: Ochi17_103 Start: 54088, Stop: 54288, Start Num: 3

Candidate Starts for Ochi17_103:

(Start: 3 @54088 has 15 MA's), (6, 54103), (7, 54109), (9, 54205),

Gene: OfUltron_104 Start: 54637, Stop: 54837, Start Num: 3

Candidate Starts for OfUltron_104:

(Start: 3 @54637 has 15 MA's), (6, 54652), (7, 54658), (9, 54754),

Gene: Okabe_89 Start: 49807, Stop: 50004, Start Num: 4

Candidate Starts for Okabe_89:

(Start: 4 @49807 has 97 MA's),

Gene: OlympiaSaint_101 Start: 54516, Stop: 54716, Start Num: 4
Candidate Starts for OlympiaSaint_101:
(1, 54471), (Start: 4 @54516 has 97 MA's), (7, 54537), (9, 54633),

Gene: Ovechkin_100 Start: 54066, Stop: 54266, Start Num: 3
Candidate Starts for Ovechkin_100:
(Start: 3 @54066 has 15 MA's), (6, 54081), (7, 54087), (9, 54183),

Gene: OwlsT2W_95 Start: 52273, Stop: 52470, Start Num: 4
Candidate Starts for OwlsT2W_95:
(Start: 4 @52273 has 97 MA's),

Gene: Peridot_100 Start: 53782, Stop: 53979, Start Num: 4
Candidate Starts for Peridot_100:
(Start: 4 @53782 has 97 MA's),

Gene: Phalconet_98 Start: 53422, Stop: 53619, Start Num: 4
Candidate Starts for Phalconet_98:
(Start: 4 @53422 has 97 MA's),

Gene: Phatniss_95 Start: 52754, Stop: 52951, Start Num: 4
Candidate Starts for Phatniss_95:
(Start: 4 @52754 has 97 MA's), (9, 52868),

Gene: PhesterPhotato_101 Start: 53396, Stop: 53593, Start Num: 4
Candidate Starts for PhesterPhotato_101:
(Start: 4 @53396 has 97 MA's), (9, 53510),

Gene: PhlipPhlop_87 Start: 54831, Stop: 55031, Start Num: 4
Candidate Starts for PhlipPhlop_87:
(Start: 4 @54831 has 97 MA's), (9, 54948),

Gene: Pippy_95 Start: 52621, Stop: 52821, Start Num: 4
Candidate Starts for Pippy_95:
(1, 52576), (Start: 4 @52621 has 97 MA's), (7, 52642), (9, 52738),

Gene: Plumbus_96 Start: 51091, Stop: 51291, Start Num: 3
Candidate Starts for Plumbus_96:
(Start: 3 @51091 has 15 MA's), (6, 51106), (7, 51112), (9, 51208),

Gene: PopTart_88 Start: 50826, Stop: 51023, Start Num: 4
Candidate Starts for PopTart_88:
(Start: 4 @50826 has 97 MA's),

Gene: Priscilla_98 Start: 54448, Stop: 54648, Start Num: 4
Candidate Starts for Priscilla_98:
(1, 54403), (Start: 4 @54448 has 97 MA's), (7, 54469), (9, 54565),

Gene: Rialto_102 Start: 54561, Stop: 54758, Start Num: 4
Candidate Starts for Rialto_102:
(Start: 4 @54561 has 97 MA's),

Gene: Saal_95 Start: 54012, Stop: 54212, Start Num: 4
Candidate Starts for Saal_95:
(1, 53967), (Start: 4 @54012 has 97 MA's), (7, 54033), (9, 54129),

Gene: Sabbb_100 Start: 51981, Stop: 52178, Start Num: 4
Candidate Starts for Sabbb_100:
(Start: 4 @51981 has 97 MA's),

Gene: Sandalphon_97 Start: 55005, Stop: 55205, Start Num: 4
Candidate Starts for Sandalphon_97:
(1, 54960), (Start: 4 @55005 has 97 MA's), (7, 55026), (9, 55122),

Gene: SassyB_88 Start: 50826, Stop: 51023, Start Num: 4
Candidate Starts for SassyB_88:
(Start: 4 @50826 has 97 MA's),

Gene: Seabastian_104 Start: 54638, Stop: 54838, Start Num: 3
Candidate Starts for Seabastian_104:
(Start: 3 @54638 has 15 MA's), (6, 54653), (7, 54659), (9, 54755),

Gene: Seagreen_98 Start: 53928, Stop: 54125, Start Num: 4
Candidate Starts for Seagreen_98:
(Start: 4 @53928 has 97 MA's), (9, 54042),

Gene: ShiLan_100 Start: 56029, Stop: 56229, Start Num: 4
Candidate Starts for ShiLan_100:
(1, 55984), (Start: 4 @56029 has 97 MA's), (7, 56050), (9, 56146),

Gene: ShowerHandel_98 Start: 53294, Stop: 53494, Start Num: 4
Candidate Starts for ShowerHandel_98:
(1, 53249), (Start: 4 @53294 has 97 MA's), (7, 53315), (9, 53411),

Gene: Slim_100 Start: 53579, Stop: 53776, Start Num: 4
Candidate Starts for Slim_100:
(Start: 4 @53579 has 97 MA's),

Gene: Sparkdehlily_104 Start: 52501, Stop: 52707, Start Num: 2
Candidate Starts for Sparkdehlily_104:
(Start: 2 @52501 has 3 MA's), (6, 52522), (7, 52528), (9, 52624),

Gene: Spoonbill_97 Start: 51942, Stop: 52142, Start Num: 4
Candidate Starts for Spoonbill_97:
(1, 51897), (Start: 4 @51942 has 97 MA's), (7, 51963), (9, 52059),

Gene: Squirty_96 Start: 56914, Stop: 57111, Start Num: 4
Candidate Starts for Squirty_96:
(Start: 4 @56914 has 97 MA's),

Gene: StAnnes_101 Start: 54841, Stop: 55038, Start Num: 4
Candidate Starts for StAnnes_101:
(Start: 4 @54841 has 97 MA's),

Gene: Starcevich_99 Start: 54674, Stop: 54871, Start Num: 4

Candidate Starts for Starcevich_99:
(Start: 4 @54674 has 97 MA's),

Gene: Strokeseat_95 Start: 51707, Stop: 51904, Start Num: 4
Candidate Starts for Strokeseat_95:
(Start: 4 @51707 has 97 MA's),

Gene: SuperGrey_97 Start: 55593, Stop: 55790, Start Num: 4
Candidate Starts for SuperGrey_97:
(Start: 4 @55593 has 97 MA's),

Gene: SwagPigglett_99 Start: 55148, Stop: 55348, Start Num: 4
Candidate Starts for SwagPigglett_99:
(1, 55103), (Start: 4 @55148 has 97 MA's), (7, 55169), (9, 55265),

Gene: TDanisky_105 Start: 52501, Stop: 52707, Start Num: 2
Candidate Starts for TDanisky_105:
(Start: 2 @52501 has 3 MA's), (6, 52522), (7, 52528), (9, 52624),

Gene: Taj_103 Start: 54799, Stop: 54996, Start Num: 4
Candidate Starts for Taj_103:
(Start: 4 @54799 has 97 MA's),

Gene: Tchotchke_90 Start: 52073, Stop: 52270, Start Num: 4
Candidate Starts for Tchotchke_90:
(Start: 4 @52073 has 97 MA's),

Gene: Tootsieroll_91 Start: 53943, Stop: 54140, Start Num: 4
Candidate Starts for Tootsieroll_91:
(Start: 4 @53943 has 97 MA's),

Gene: Totinger_100 Start: 54074, Stop: 54271, Start Num: 4
Candidate Starts for Totinger_100:
(Start: 4 @54074 has 97 MA's),

Gene: Violac_98 Start: 54442, Stop: 54642, Start Num: 3
Candidate Starts for Violac_98:
(Start: 3 @54442 has 15 MA's), (6, 54457), (7, 54463), (9, 54559),

Gene: Vivum_97 Start: 55383, Stop: 55583, Start Num: 4
Candidate Starts for Vivum_97:
(1, 55338), (Start: 4 @55383 has 97 MA's), (7, 55404), (9, 55500),

Gene: Wachhund_94 Start: 50242, Stop: 50442, Start Num: 4
Candidate Starts for Wachhund_94:
(Start: 4 @50242 has 97 MA's), (9, 50359),

Gene: Wee_100 Start: 54875, Stop: 55072, Start Num: 4
Candidate Starts for Wee_100:
(Start: 4 @54875 has 97 MA's),

Gene: Whatsapiecost_91 Start: 48600, Stop: 48797, Start Num: 4
Candidate Starts for Whatsapiecost_91:

(Start: 4 @48600 has 97 MA's),

Gene: Whouxphf_101 Start: 54454, Stop: 54654, Start Num: 4

Candidate Starts for Whouxphf_101:

(1, 54409), (Start: 4 @54454 has 97 MA's), (7, 54475), (9, 54571),

Gene: XFactor_88 Start: 51391, Stop: 51588, Start Num: 4

Candidate Starts for XFactor_88:

(Start: 4 @51391 has 97 MA's),

Gene: Yorick_93 Start: 54689, Stop: 54889, Start Num: 4

Candidate Starts for Yorick_93:

(1, 54644), (Start: 4 @54689 has 97 MA's), (7, 54710), (9, 54806),

Gene: Zerg_95 Start: 53263, Stop: 53463, Start Num: 4

Candidate Starts for Zerg_95:

(Start: 4 @53263 has 97 MA's), (5, 53269), (7, 53284),

Gene: Zizzle_100 Start: 55339, Stop: 55539, Start Num: 4

Candidate Starts for Zizzle_100:

(1, 55294), (Start: 4 @55339 has 97 MA's), (7, 55360), (9, 55456),