



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 85299 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85299 has 102 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Tote_69, MiaZeal_204, Bombitas_182, Zelink_190, HokkenD_190, BAKA_203, Gwendoluna_76, PSullivan_69, Courthouse_199, Hannaconda_189, Halley_197, Dallas_196, Phoebus_197, JuicyJay_191, Hughesyang_195, Ariel_203, Minerva_197, Schatzie_191, EricMillard_193, Swole_71, Squint_193, Redno2_189, Beem_198, Kalah2_198, Papez_75, Duke13_197, Pita2_74, ThreeRngTarjay_196, Gandalf20_72, Jorgensen_80, Dove_189, Bagrid_204, Superphikiman_196, DmpstrDiver_196, Ejimix_186, Espresso_66, Yeet_187, NihilNomen_198, JuliaChild_74
- Track 2 : PacerPaul_78, Bircsak_74, Lucky2013_194, Odette_200, Francis47_75, Wheeler_77, Agaliana_71, Porcelain_197, Wanda_194, Pound_188, Gompeii16_74, KBG_71
- Track 3 : JackSparrow_74, Bxb1_67, Trouble_73, Perseus_73, Hami1_63, Aeneas_78, Applejack_72
- Track 4 : Aneem_75, Abbyshoes_73, Niza_73, Orange_73, Gonephishing_192, MaCh_74, Bowtie_75, Smairt_77, TinyTimmy_70, Dussy_72, Flaverint_75, Mule_72, Timothy_74, Snape_74, PhrostyMug_75, Et2Brutus_73, Kenmech_75, Joselito_73, Lucivia_75, Insomnia_71, Fibonacci_73, Klein_201, Mabel_74, Ebony_74, Munch_74, Mulciber_72, Jabith_73
- Track 5 : SamScheppers_41, Chancellor_42, Eponine_44, Fionnbharth_42, Slarp_42, Wintermute_42, Cheetobro_42, OmniCritical_41, Malthus_43, Taquito_42
- Track 6 : Juliette_44, JF1_42, Y10_41, Ruthiejr_43, Y2_41
- Track 7 : Mitti_42
- Track 8 : MissDaisy_41

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

The start number called the most often in the published annotations is 2, it was called in 89 of the 89 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abbyshoes_73, Aeneas_78, Agaliana_71, Aneem_75, Applejack_72, Ariel_203, BAKA_203, Bagrid_204, Beem_198, Bircsak_74, Bombitas_182, Bowtie_75, Bxb1_67, Chancellor_42, Cheetobro_42, Courthouse_199, Dallas_196, DmpstrDiver_196, Dove_189, Duke13_197, Dussy_72, Ebony_74, Ejimix_186,

Eponine_44, EricMillard_193, Espresso_66, Et2Brutus_73, Fibonacci_73, Fionnbharth_42, Flaverint_75, Francis47_75, Gandalf20_72, Gompeii16_74, Gonephishing_192, Gwendoluna_76, Halley_197, Hami1_63, Hannaconda_189, HokkenD_190, Hughesyang_195, Insomnia_71, JF1_42, Jabith_73, JackSparrow_74, Jorgensen_80, Joselito_73, JuicyJay_191, JuliaChild_74, Juliette_44, KBG_71, Kalah2_198, Kenmech_75, Klein_201, Lucivia_75, Lucky2013_194, MaCh_74, Mabel_74, Malthus_43, MiaZeal_204, Minerva_197, MissDaisy_41, Mitti_42, Mulciber_72, Mule_72, Munch_74, NihilNomen_198, Niza_73, Odette_200, OmniCritical_41, Orange_73, PSullivan_69, PacerPaul_78, Papez_75, Perseus_73, Phoebus_197, PhrostyMug_75, Pita2_74, Porcelain_197, Pound_188, Redno2_189, Ruthiejr_43, SamScheppers_41, Schatzie_191, Slarp_42, Smairt_77, Snape_74, Squint_193, Superphikiman_196, Swole_71, Taquito_42, ThreeRngTarjay_196, Timothy_74, TinyTimmy_70, Tote_69, Trouble_73, Wanda_194, Wheeler_77, Wintermute_42, Y10_41, Y2_41, Yeet_187, Zelink_190,

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 2:

- Found in 102 of 102 (100.0%) of genes in pham
- Manual Annotations of this start: 89 of 89
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abbyshoes_73 (A1), Aeneas_78 (A1), Agaliana_71 (A1), Aneem_75 (A11), Applejack_72 (A1), Ariel_203 (J), BAKA_203 (J), Bagrid_204 (J), Beem_198 (J), Bircsak_74 (A1), Bombitas_182 (J), Bowtie_75 (A11), Bxb1_67 (A1), Chancellor_42 (K4), Cheetobro_42 (K4), Courthouse_199 (J), Dallas_196 (J), DmpstrDiver_196 (J), Dove_189 (J), Duke13_197 (J), Dussy_72 (A1), Ebony_74 (A11), Ejimix_186 (J), Eponine_44 (K4), EricMillard_193 (J), Espresso_66 (A1), Et2Brutus_73 (A11), Fibonacci_73 (A11), Fionnbharth_42 (K4), Flaverint_75 (A11), Francis47_75 (A1), Gandalf20_72 (A1), Gompeii16_74 (A1), Gonephishing_192 (J), Gwendoluna_76 (A1), Halley_197 (J), Hami1_63 (A1), Hannaconda_189 (J), HokkenD_190 (J), Hughesyang_195 (J), Insomnia_71 (A11), JF1_42 (K4), Jabith_73 (A11), JackSparrow_74 (A1), Jorgensen_80 (A1), Joselito_73 (A11), JuicyJay_191 (J), JuliaChild_74 (A1), Juliette_44 (K4), KBG_71 (A1), Kalah2_198 (J), Kenmech_75 (A1), Klein_201 (J), Lucivia_75 (A11), Lucky2013_194 (J), MaCh_74 (A11), Mabel_74 (A11), Malthus_43 (K4), MiaZeal_204 (J), Minerva_197 (J), MissDaisy_41 (K4), Mitti_42 (K4), Mulciber_72 (A11), Mule_72 (A1), Munch_74 (A11), NihilNomen_198 (J), Niza_73 (A1), Odette_200 (J), OmniCritical_41 (K4), Orange_73 (A11), PSullivan_69 (A1), PacerPaul_78 (A1), Papez_75 (A1), Perseus_73 (A1), Phoebus_197 (J), PhrostyMug_75 (A1), Pita2_74 (A1), Porcelain_197 (J), Pound_188 (J), Redno2_189 (J), Ruthiejr_43 (K4), SamScheppers_41 (K4), Schatzie_191 (J), Slarp_42 (K4), Smairt_77 (A1), Snape_74 (A11), Squint_193 (J), Superphikiman_196 (J), Swole_71 (A1), Taquito_42 (K4), ThreeRngTarjay_196 (J), Timothy_74 (A11), TinyTimmy_70 (A11), Tote_69 (A1), Trouble_73 (A1), Wanda_194 (J), Wheeler_77 (A1), Wintermute_42 (K4), Y10_41 (K4), Y2_41 (K4), Yeet_187 (J), Zelink_190 (J),

Summary by clusters:

There are 4 clusters represented in this pham: A1, J, A11, K4,

Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 24 times for cluster A1.

Info for manual annotations of cluster A11:

- Start number 2 was manually annotated 16 times for cluster A11.

Info for manual annotations of cluster J:

- Start number 2 was manually annotated 32 times for cluster J.

Info for manual annotations of cluster K4:

- Start number 2 was manually annotated 17 times for cluster K4.

Gene Information:

Gene: Abbyshoes_73 Start: 45261, Stop: 44944, Start Num: 2

Candidate Starts for Abbyshoes_73:

(Start: 2 @45261 has 89 MA's), (4, 45186), (10, 45087), (14, 44964),

Gene: Aeneas_78 Start: 47620, Stop: 47306, Start Num: 2

Candidate Starts for Aeneas_78:

(Start: 2 @47620 has 89 MA's), (4, 47545),

Gene: Agaliana_71 Start: 44149, Stop: 43859, Start Num: 2

Candidate Starts for Agaliana_71:

(Start: 2 @44149 has 89 MA's), (4, 44074), (10, 43975),

Gene: Aneem_75 Start: 43291, Stop: 42977, Start Num: 2

Candidate Starts for Aneem_75:

(Start: 2 @43291 has 89 MA's), (4, 43216), (10, 43117), (14, 42994),

Gene: Applejack_72 Start: 43513, Stop: 43199, Start Num: 2

Candidate Starts for Applejack_72:

(Start: 2 @43513 has 89 MA's), (4, 43438),

Gene: Ariel_203 Start: 95990, Stop: 95700, Start Num: 2

Candidate Starts for Ariel_203:

(Start: 2 @95990 has 89 MA's), (3, 95930), (4, 95915), (10, 95816),

Gene: BAKA_203 Start: 99445, Stop: 99155, Start Num: 2

Candidate Starts for BAKA_203:

(Start: 2 @99445 has 89 MA's), (3, 99385), (4, 99370), (10, 99271),

Gene: Bagrid_204 Start: 99750, Stop: 99460, Start Num: 2

Candidate Starts for Bagrid_204:

(Start: 2 @99750 has 89 MA's), (3, 99690), (4, 99675), (10, 99576),

Gene: Beem_198 Start: 98453, Stop: 98163, Start Num: 2

Candidate Starts for Beem_198:

(Start: 2 @98453 has 89 MA's), (3, 98393), (4, 98378), (10, 98279),

Gene: Bircsak_74 Start: 47992, Stop: 47702, Start Num: 2

Candidate Starts for Bircsak_74:

(Start: 2 @47992 has 89 MA's), (4, 47917), (10, 47818),

Gene: Bombitas_182 Start: 95125, Stop: 94835, Start Num: 2

Candidate Starts for Bombitas_182:

(Start: 2 @95125 has 89 MA's), (3, 95065), (4, 95050), (10, 94951),

Gene: Bowtie_75 Start: 43298, Stop: 42984, Start Num: 2

Candidate Starts for Bowtie_75:

(Start: 2 @43298 has 89 MA's), (4, 43223), (10, 43124), (14, 43001),

Gene: Bxb1_67 Start: 43816, Stop: 43502, Start Num: 2

Candidate Starts for Bxb1_67:

(Start: 2 @43816 has 89 MA's), (4, 43741),

Gene: Chancellor_42 Start: 32018, Stop: 32407, Start Num: 2

Candidate Starts for Chancellor_42:

(Start: 2 @32018 has 89 MA's), (4, 32090), (7, 32120), (8, 32240), (12, 32285), (13, 32381),

Gene: Cheetobro_42 Start: 32015, Stop: 32404, Start Num: 2

Candidate Starts for Cheetobro_42:

(Start: 2 @32015 has 89 MA's), (4, 32087), (7, 32117), (8, 32237), (12, 32282), (13, 32378),

Gene: Courthouse_199 Start: 96439, Stop: 96149, Start Num: 2

Candidate Starts for Courthouse_199:

(Start: 2 @96439 has 89 MA's), (3, 96379), (4, 96364), (10, 96265),

Gene: Dallas_196 Start: 97473, Stop: 97183, Start Num: 2

Candidate Starts for Dallas_196:

(Start: 2 @97473 has 89 MA's), (3, 97413), (4, 97398), (10, 97299),

Gene: DmpstrDiver_196 Start: 97318, Stop: 97028, Start Num: 2

Candidate Starts for DmpstrDiver_196:

(Start: 2 @97318 has 89 MA's), (3, 97258), (4, 97243), (10, 97144),

Gene: Dove_189 Start: 93733, Stop: 93443, Start Num: 2

Candidate Starts for Dove_189:

(Start: 2 @93733 has 89 MA's), (3, 93673), (4, 93658), (10, 93559),

Gene: Duke13_197 Start: 97742, Stop: 97452, Start Num: 2

Candidate Starts for Duke13_197:

(Start: 2 @97742 has 89 MA's), (3, 97682), (4, 97667), (10, 97568),

Gene: Dussy_72 Start: 45281, Stop: 44964, Start Num: 2

Candidate Starts for Dussy_72:

(Start: 2 @45281 has 89 MA's), (4, 45206), (10, 45107), (14, 44984),

Gene: Ebony_74 Start: 42862, Stop: 42548, Start Num: 2

Candidate Starts for Ebony_74:

(Start: 2 @42862 has 89 MA's), (4, 42787), (10, 42688), (14, 42565),

Gene: Ejimix_186 Start: 96811, Stop: 96521, Start Num: 2
Candidate Starts for Ejimix_186:
(Start: 2 @96811 has 89 MA's), (3, 96751), (4, 96736), (10, 96637),

Gene: Eponine_44 Start: 32771, Stop: 33160, Start Num: 2
Candidate Starts for Eponine_44:
(Start: 2 @32771 has 89 MA's), (4, 32843), (7, 32873), (8, 32993), (12, 33038), (13, 33134),

Gene: EricMillard_193 Start: 98521, Stop: 98231, Start Num: 2
Candidate Starts for EricMillard_193:
(Start: 2 @98521 has 89 MA's), (3, 98461), (4, 98446), (10, 98347),

Gene: Espresso_66 Start: 44184, Stop: 43894, Start Num: 2
Candidate Starts for Espresso_66:
(Start: 2 @44184 has 89 MA's), (3, 44124), (4, 44109), (10, 44010),

Gene: Et2Brutus_73 Start: 42825, Stop: 42511, Start Num: 2
Candidate Starts for Et2Brutus_73:
(Start: 2 @42825 has 89 MA's), (4, 42750), (10, 42651), (14, 42528),

Gene: Fibonacci_73 Start: 42831, Stop: 42517, Start Num: 2
Candidate Starts for Fibonacci_73:
(Start: 2 @42831 has 89 MA's), (4, 42756), (10, 42657), (14, 42534),

Gene: Fionnbharth_42 Start: 32006, Stop: 32395, Start Num: 2
Candidate Starts for Fionnbharth_42:
(Start: 2 @32006 has 89 MA's), (4, 32078), (7, 32108), (8, 32228), (12, 32273), (13, 32369),

Gene: Flaverint_75 Start: 43289, Stop: 42975, Start Num: 2
Candidate Starts for Flaverint_75:
(Start: 2 @43289 has 89 MA's), (4, 43214), (10, 43115), (14, 42992),

Gene: Francis47_75 Start: 47993, Stop: 47703, Start Num: 2
Candidate Starts for Francis47_75:
(Start: 2 @47993 has 89 MA's), (4, 47918), (10, 47819),

Gene: Gandalf20_72 Start: 45469, Stop: 45179, Start Num: 2
Candidate Starts for Gandalf20_72:
(Start: 2 @45469 has 89 MA's), (3, 45409), (4, 45394), (10, 45295),

Gene: Gompeii16_74 Start: 47993, Stop: 47703, Start Num: 2
Candidate Starts for Gompeii16_74:
(Start: 2 @47993 has 89 MA's), (4, 47918), (10, 47819),

Gene: Gonephishing_192 Start: 96161, Stop: 95847, Start Num: 2
Candidate Starts for Gonephishing_192:
(Start: 2 @96161 has 89 MA's), (4, 96086), (10, 95987), (14, 95864),

Gene: Gwendoluna_76 Start: 46935, Stop: 46645, Start Num: 2
Candidate Starts for Gwendoluna_76:
(Start: 2 @46935 has 89 MA's), (3, 46875), (4, 46860), (10, 46761),

Gene: Halley_197 Start: 96979, Stop: 96689, Start Num: 2
Candidate Starts for Halley_197:
(Start: 2 @96979 has 89 MA's), (3, 96919), (4, 96904), (10, 96805),

Gene: Hami1_63 Start: 40335, Stop: 40021, Start Num: 2
Candidate Starts for Hami1_63:
(Start: 2 @40335 has 89 MA's), (4, 40260),

Gene: Hannaconda_189 Start: 97412, Stop: 97122, Start Num: 2
Candidate Starts for Hannaconda_189:
(Start: 2 @97412 has 89 MA's), (3, 97352), (4, 97337), (10, 97238),

Gene: HokkenD_190 Start: 98907, Stop: 98617, Start Num: 2
Candidate Starts for HokkenD_190:
(Start: 2 @98907 has 89 MA's), (3, 98847), (4, 98832), (10, 98733),

Gene: Hughesyang_195 Start: 98087, Stop: 97797, Start Num: 2
Candidate Starts for Hughesyang_195:
(Start: 2 @98087 has 89 MA's), (3, 98027), (4, 98012), (10, 97913),

Gene: Insomnia_71 Start: 43006, Stop: 42692, Start Num: 2
Candidate Starts for Insomnia_71:
(Start: 2 @43006 has 89 MA's), (4, 42931), (10, 42832), (14, 42709),

Gene: JF1_42 Start: 32004, Stop: 32393, Start Num: 2
Candidate Starts for JF1_42:
(Start: 2 @32004 has 89 MA's), (4, 32076), (7, 32106), (8, 32226), (9, 32235), (11, 32256), (12, 32271),

Gene: Jabith_73 Start: 43023, Stop: 42709, Start Num: 2
Candidate Starts for Jabith_73:
(Start: 2 @43023 has 89 MA's), (4, 42948), (10, 42849), (14, 42726),

Gene: JackSparrow_74 Start: 45036, Stop: 44722, Start Num: 2
Candidate Starts for JackSparrow_74:
(Start: 2 @45036 has 89 MA's), (4, 44961),

Gene: Jorgensen_80 Start: 47070, Stop: 46780, Start Num: 2
Candidate Starts for Jorgensen_80:
(Start: 2 @47070 has 89 MA's), (3, 47010), (4, 46995), (10, 46896),

Gene: Joselito_73 Start: 43043, Stop: 42729, Start Num: 2
Candidate Starts for Joselito_73:
(Start: 2 @43043 has 89 MA's), (4, 42968), (10, 42869), (14, 42746),

Gene: JuicyJay_191 Start: 98405, Stop: 98115, Start Num: 2
Candidate Starts for JuicyJay_191:
(Start: 2 @98405 has 89 MA's), (3, 98345), (4, 98330), (10, 98231),

Gene: JuliaChild_74 Start: 46029, Stop: 45739, Start Num: 2
Candidate Starts for JuliaChild_74:
(Start: 2 @46029 has 89 MA's), (3, 45969), (4, 45954), (10, 45855),

Gene: Juliette_44 Start: 32163, Stop: 32552, Start Num: 2

Candidate Starts for Juliette_44:

(Start: 2 @32163 has 89 MA's), (4, 32235), (7, 32265), (8, 32385), (9, 32394), (11, 32415), (12, 32430),

Gene: KBG_71 Start: 46376, Stop: 46086, Start Num: 2

Candidate Starts for KBG_71:

(Start: 2 @46376 has 89 MA's), (4, 46301), (10, 46202),

Gene: Kalah2_198 Start: 99798, Stop: 99508, Start Num: 2

Candidate Starts for Kalah2_198:

(Start: 2 @99798 has 89 MA's), (3, 99738), (4, 99723), (10, 99624),

Gene: Kenmech_75 Start: 46407, Stop: 46090, Start Num: 2

Candidate Starts for Kenmech_75:

(Start: 2 @46407 has 89 MA's), (4, 46332), (10, 46233), (14, 46110),

Gene: Klein_201 Start: 97348, Stop: 97034, Start Num: 2

Candidate Starts for Klein_201:

(Start: 2 @97348 has 89 MA's), (4, 97273), (10, 97174), (14, 97051),

Gene: Lucivia_75 Start: 43322, Stop: 43008, Start Num: 2

Candidate Starts for Lucivia_75:

(Start: 2 @43322 has 89 MA's), (4, 43247), (10, 43148), (14, 43025),

Gene: Lucky2013_194 Start: 94626, Stop: 94336, Start Num: 2

Candidate Starts for Lucky2013_194:

(Start: 2 @94626 has 89 MA's), (4, 94551), (10, 94452),

Gene: MaCh_74 Start: 43286, Stop: 42972, Start Num: 2

Candidate Starts for MaCh_74:

(Start: 2 @43286 has 89 MA's), (4, 43211), (10, 43112), (14, 42989),

Gene: Mabel_74 Start: 43287, Stop: 42973, Start Num: 2

Candidate Starts for Mabel_74:

(Start: 2 @43287 has 89 MA's), (4, 43212), (10, 43113), (14, 42990),

Gene: Malthus_43 Start: 31930, Stop: 32319, Start Num: 2

Candidate Starts for Malthus_43:

(Start: 2 @31930 has 89 MA's), (4, 32002), (7, 32032), (8, 32152), (12, 32197), (13, 32293),

Gene: MiaZeal_204 Start: 96656, Stop: 96366, Start Num: 2

Candidate Starts for MiaZeal_204:

(Start: 2 @96656 has 89 MA's), (3, 96596), (4, 96581), (10, 96482),

Gene: Minerva_197 Start: 96972, Stop: 96682, Start Num: 2

Candidate Starts for Minerva_197:

(Start: 2 @96972 has 89 MA's), (3, 96912), (4, 96897), (10, 96798),

Gene: MissDaisy_41 Start: 31770, Stop: 32108, Start Num: 2

Candidate Starts for MissDaisy_41:

(1, 31764), (Start: 2 @31770 has 89 MA's), (4, 31842), (5, 31845), (6, 31851), (7, 31872), (8, 31923), (9, 31932), (11, 31953), (12, 31968),

Gene: Mitti_42 Start: 31943, Stop: 32332, Start Num: 2

Candidate Starts for Mitti_42:

(1, 31937), (Start: 2 @31943 has 89 MA's), (4, 32015), (5, 32018), (6, 32024), (7, 32045), (8, 32165), (12, 32210), (13, 32306),

Gene: Mulciber_72 Start: 42828, Stop: 42514, Start Num: 2

Candidate Starts for Mulciber_72:

(Start: 2 @42828 has 89 MA's), (4, 42753), (10, 42654), (14, 42531),

Gene: Mule_72 Start: 44978, Stop: 44661, Start Num: 2

Candidate Starts for Mule_72:

(Start: 2 @44978 has 89 MA's), (4, 44903), (10, 44804), (14, 44681),

Gene: Munch_74 Start: 43291, Stop: 42977, Start Num: 2

Candidate Starts for Munch_74:

(Start: 2 @43291 has 89 MA's), (4, 43216), (10, 43117), (14, 42994),

Gene: NihilNomen_198 Start: 96533, Stop: 96243, Start Num: 2

Candidate Starts for NihilNomen_198:

(Start: 2 @96533 has 89 MA's), (3, 96473), (4, 96458), (10, 96359),

Gene: Niza_73 Start: 46297, Stop: 45980, Start Num: 2

Candidate Starts for Niza_73:

(Start: 2 @46297 has 89 MA's), (4, 46222), (10, 46123), (14, 46000),

Gene: Odette_200 Start: 99602, Stop: 99312, Start Num: 2

Candidate Starts for Odette_200:

(Start: 2 @99602 has 89 MA's), (4, 99527), (10, 99428),

Gene: OmniCritical_41 Start: 31915, Stop: 32304, Start Num: 2

Candidate Starts for OmniCritical_41:

(Start: 2 @31915 has 89 MA's), (4, 31987), (7, 32017), (8, 32137), (12, 32182), (13, 32278),

Gene: Orange_73 Start: 42840, Stop: 42526, Start Num: 2

Candidate Starts for Orange_73:

(Start: 2 @42840 has 89 MA's), (4, 42765), (10, 42666), (14, 42543),

Gene: PSullivan_69 Start: 44096, Stop: 43806, Start Num: 2

Candidate Starts for PSullivan_69:

(Start: 2 @44096 has 89 MA's), (3, 44036), (4, 44021), (10, 43922),

Gene: PacerPaul_78 Start: 47360, Stop: 47070, Start Num: 2

Candidate Starts for PacerPaul_78:

(Start: 2 @47360 has 89 MA's), (4, 47285), (10, 47186),

Gene: Papez_75 Start: 46488, Stop: 46198, Start Num: 2

Candidate Starts for Papez_75:

(Start: 2 @46488 has 89 MA's), (3, 46428), (4, 46413), (10, 46314),

Gene: Perseus_73 Start: 47153, Stop: 46839, Start Num: 2

Candidate Starts for Perseus_73:

(Start: 2 @47153 has 89 MA's), (4, 47078),

Gene: Phoebus_197 Start: 100424, Stop: 100134, Start Num: 2
Candidate Starts for Phoebus_197:
(Start: 2 @100424 has 89 MA's), (3, 100364), (4, 100349), (10, 100250),

Gene: PhrostyMug_75 Start: 47152, Stop: 46835, Start Num: 2
Candidate Starts for PhrostyMug_75:
(Start: 2 @47152 has 89 MA's), (4, 47077), (10, 46978), (14, 46855),

Gene: Pita2_74 Start: 45593, Stop: 45303, Start Num: 2
Candidate Starts for Pita2_74:
(Start: 2 @45593 has 89 MA's), (3, 45533), (4, 45518), (10, 45419),

Gene: Porcelain_197 Start: 95572, Stop: 95282, Start Num: 2
Candidate Starts for Porcelain_197:
(Start: 2 @95572 has 89 MA's), (4, 95497), (10, 95398),

Gene: Pound_188 Start: 96613, Stop: 96323, Start Num: 2
Candidate Starts for Pound_188:
(Start: 2 @96613 has 89 MA's), (4, 96538), (10, 96439),

Gene: Redno2_189 Start: 94480, Stop: 94190, Start Num: 2
Candidate Starts for Redno2_189:
(Start: 2 @94480 has 89 MA's), (3, 94420), (4, 94405), (10, 94306),

Gene: Ruthiejr_43 Start: 31895, Stop: 32284, Start Num: 2
Candidate Starts for Ruthiejr_43:
(Start: 2 @31895 has 89 MA's), (4, 31967), (7, 31997), (8, 32117), (9, 32126), (11, 32147), (12, 32162),

Gene: SamScheppers_41 Start: 32409, Stop: 32798, Start Num: 2
Candidate Starts for SamScheppers_41:
(Start: 2 @32409 has 89 MA's), (4, 32481), (7, 32511), (8, 32631), (12, 32676), (13, 32772),

Gene: Schatzie_191 Start: 97414, Stop: 97124, Start Num: 2
Candidate Starts for Schatzie_191:
(Start: 2 @97414 has 89 MA's), (3, 97354), (4, 97339), (10, 97240),

Gene: Slarp_42 Start: 32018, Stop: 32407, Start Num: 2
Candidate Starts for Slarp_42:
(Start: 2 @32018 has 89 MA's), (4, 32090), (7, 32120), (8, 32240), (12, 32285), (13, 32381),

Gene: Smairt_77 Start: 48164, Stop: 47847, Start Num: 2
Candidate Starts for Smairt_77:
(Start: 2 @48164 has 89 MA's), (4, 48089), (10, 47990), (14, 47867),

Gene: Snape_74 Start: 42830, Stop: 42516, Start Num: 2
Candidate Starts for Snape_74:
(Start: 2 @42830 has 89 MA's), (4, 42755), (10, 42656), (14, 42533),

Gene: Squint_193 Start: 95657, Stop: 95367, Start Num: 2
Candidate Starts for Squint_193:
(Start: 2 @95657 has 89 MA's), (3, 95597), (4, 95582), (10, 95483),

Gene: Superphikiman_196 Start: 95524, Stop: 95234, Start Num: 2
Candidate Starts for Superphikiman_196:
(Start: 2 @95524 has 89 MA's), (3, 95464), (4, 95449), (10, 95350),

Gene: Swole_71 Start: 45503, Stop: 45213, Start Num: 2
Candidate Starts for Swole_71:
(Start: 2 @45503 has 89 MA's), (3, 45443), (4, 45428), (10, 45329),

Gene: Taquito_42 Start: 32404, Stop: 32793, Start Num: 2
Candidate Starts for Taquito_42:
(Start: 2 @32404 has 89 MA's), (4, 32476), (7, 32506), (8, 32626), (12, 32671), (13, 32767),

Gene: ThreeRngTarjay_196 Start: 99252, Stop: 98962, Start Num: 2
Candidate Starts for ThreeRngTarjay_196:
(Start: 2 @99252 has 89 MA's), (3, 99192), (4, 99177), (10, 99078),

Gene: Timothy_74 Start: 42807, Stop: 42493, Start Num: 2
Candidate Starts for Timothy_74:
(Start: 2 @42807 has 89 MA's), (4, 42732), (10, 42633), (14, 42510),

Gene: TinyTimmy_70 Start: 42536, Stop: 42222, Start Num: 2
Candidate Starts for TinyTimmy_70:
(Start: 2 @42536 has 89 MA's), (4, 42461), (10, 42362), (14, 42239),

Gene: Tote_69 Start: 42770, Stop: 42480, Start Num: 2
Candidate Starts for Tote_69:
(Start: 2 @42770 has 89 MA's), (3, 42710), (4, 42695), (10, 42596),

Gene: Trouble_73 Start: 45855, Stop: 45541, Start Num: 2
Candidate Starts for Trouble_73:
(Start: 2 @45855 has 89 MA's), (4, 45780),

Gene: Wanda_194 Start: 94985, Stop: 94695, Start Num: 2
Candidate Starts for Wanda_194:
(Start: 2 @94985 has 89 MA's), (4, 94910), (10, 94811),

Gene: Wheeler_77 Start: 46969, Stop: 46679, Start Num: 2
Candidate Starts for Wheeler_77:
(Start: 2 @46969 has 89 MA's), (4, 46894), (10, 46795),

Gene: Wintermute_42 Start: 32004, Stop: 32393, Start Num: 2
Candidate Starts for Wintermute_42:
(Start: 2 @32004 has 89 MA's), (4, 32076), (7, 32106), (8, 32226), (12, 32271), (13, 32367),

Gene: Y10_41 Start: 32004, Stop: 32393, Start Num: 2
Candidate Starts for Y10_41:
(Start: 2 @32004 has 89 MA's), (4, 32076), (7, 32106), (8, 32226), (9, 32235), (11, 32256), (12, 32271),

Gene: Y2_41 Start: 32004, Stop: 32393, Start Num: 2
Candidate Starts for Y2_41:

(Start: 2 @32004 has 89 MA's), (4, 32076), (7, 32106), (8, 32226), (9, 32235), (11, 32256), (12, 32271),

Gene: Yeet_187 Start: 96121, Stop: 95831, Start Num: 2

Candidate Starts for Yeet_187:

(Start: 2 @96121 has 89 MA's), (3, 96061), (4, 96046), (10, 95947),

Gene: Zelink_190 Start: 96903, Stop: 96613, Start Num: 2

Candidate Starts for Zelink_190:

(Start: 2 @96903 has 89 MA's), (3, 96843), (4, 96828), (10, 96729),