Pham 289302

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 289302 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289302 has 88 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Legacy_37, BeardedLady_38, Nerdos_36, Caliburn_37, Unstoppable_37, SunsetPointe_37, Leviticus_37, Aaronocolus_37, Esperer_37, Hydra_39, Phettuccine_37, Bovely_37, Ozzie_37, Indigo_36
• Track 2 : Snorlax_37, Werner_37, Chucky_37, Emaanora_40, Dwayne_37, TagePhighter_39, Triste_37, SarahRose_37, BarryBee_40, Whatever_37, Asten_37, OzzyJ_38
• Track 3 : Toma_37, Danzina_39, Celeste_38, Zemlya_39, Dattran_39, Goby_37, Sujidade_38, Brataylor_40, Godpower_38, Lika_37
• Track 4 : Lorelei_38, Rana_38, Nabi_38
• Track 5 : Nanodon_39
• Track 6 : Rusticus_38, EnochSoames_40, Izzy_38, Jash_38, BryanRecycles_38, Eddasa_38, Oliynyk_38
• Track 7 : Issmi_39
• Track 8 : Tefunt_39, Haizum_39
• Track 9 : Thestral_39, Bowden_38, TrvxScott_37, Zainub_40, TinaBelcher_38
• Track 10 : Puginator_40, Paolo_40
• Track 11 : Omar_40
• Track 12 : BartholomewSD_40, Alvy_40
• Track 13 : Superstar_41
• Track 14 : Triumph_39, Axiom_38
• Track 15 : Nishikigoi_39
• Track 16 : Pablito_37
• Track 17 : Andris_37
• Track 18 : Caelum_39
• Track 19 : Marav_41
• Track 20 : Amethyst_37
• Track 21 : Jevington_40
• Track 22 : Sudan_39, Alsaber_39, Pavo_39, Conan_39, ElGato_39, Kaine_38, Provolone_39
• Track 23 : Saftant_38
• Track 24 : Speedwell_43
• Track 25 : Dexers_37
• Track 26 : Jhitchelle_39, ZamZam_41
• Track 27 : Vanseggelen_43
• Track 28 : Celery_41
• Track 29 : Verabelle_41
• Track 30 : BroPlease_38, GreenWeasel_39

• Track 31 : phiHau3_39

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

The start number called the most often in the published annotations is 5, it was called in 80 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aaronocolus_37, Alsaber_39, Alvy_40, Amethyst_37, Andris_37, Asten_37, Axiom_38, BarryBee_40, BartholomewSD_40, BeardedLady_38, Bovely_37, Bowden_38, Brataylor_40, BroPlease_38, BryanRecycles_38, Caelum_39, Caliburn_37, Celery_41, Celeste_38, Chucky_37, Conan_39, Danzina_39, Dattran_39, Dexers_37, Dwayne_37, Eddasa_38, ElGato_39, Emaanora_40, EnochSoames_40, Esperer_37, Goby_37, Godpower_38, GreenWeasel_39, Haizum_39, Hydra_39, Indigo_36, Issmi_39, Izzy_38, Jash_38, Jevington_40, Jhitchelle_39, Kaine_38, Legacy_37, Leviticus_37, Lika_37, Lorelei_38, Marav_41, Nabi_38, Nanodon_39, Nerdos_36, Nishikigoi_39, Oliynyk_38, Omar_40, Ozzie_37, OzzyJ_38, Pablito_37, Paolo_40, Pavo_39, Phettuccine_37, Provolone_39, Puginator_40, Rana_38, Rusticus_38, Saftant_38, SarahRose_37, Snorlax_37, Speedwell_43, Sudan_39, Sujidade_38, SunsetPointe_37, Superstar_41, TagePhighter_39, Tefunt_39, Thestral_39, TinaBelcher_38, Toma_37, Triste_37, Triumph_39, TrvxScott_37, Unstoppable_37, Verabelle_41, Werner_37, Whatever_37, Zainub_40, ZamZam_41, Zemlya_39, phiHau3_39,

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

Genes that do not have the "Most Annotated" start:
• Vanseggelen_43,

Summary by start number:

Start 5:
• Found in 87 of 88 (98.9%) of genes in pham
• Manual Annotations of this start: 80 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aaronocolus_37 (BD1), Alsaber_39 (BD3), Alvy_40 (BD2), Amethyst_37 (BD2), Andris_37 (BD2), Asten_37 (BD1), Axiom_38 (BD2), BarryBee_40 (BD1), BartholomewSD_40 (BD2), BeardedLady_38 (BD1), Bovely_37 (BD1), Bowden_38 (BD2), Brataylor_40 (BD1), BroPlease_38 (BD4), BryanRecycles_38 (BD1), Caelum_39 (BD2), Caliburn_37 (BD1), Celery_41 (BD3), Celeste_38 (BD1), Chucky_37 (BD1), Conan_39 (BD3), Danzina_39 (BD1), Dattran_39 (BD1), Dexers_37 (BD3), Dwayne_37 (BD1), Eddasa_38 (BD1), ElGato_39 (BD3), Emaanora_40 (BD1), EnochSoames_40 (BD1), Esperer_37 (BD1), Goby_37 (BD1), Godpower_38 (BD1), GreenWeasel_39 (BD4), Haizum_39 (BD2), Hydra_39 (BD1), Indigo_36 (BD1), Issmi_39 (BD2), Izzy_38 (BD1), Jash_38 (BD1), Jevington_40 (BD2), Jhitchelle_39 (BD3), Kaine_38 (BD3), Legacy_37 (BD1), Leviticus_37 (BD1), Lika_37 (BD1), Lorelei_38 (BD1), Marav_41 (BD2), Nabi_38 (BD1), Nanodon_39 (BD1), Nerdos_36 (BD1), Nishikigoi_39 (BD2), Oliynyk_38 (BD1), Omar_40 (BD2), Ozzie_37 (BD1), OzzyJ_38 (BD1), Pablito_37 (BD2),

Paolo_40 (BD2), Pavo_39 (BD3), Phettuccine_37 (BD1), Provolone_39 (BD3), Puginator_40 (BD2), Rana_38 (BD1), Rusticus_38 (BD1), Saftant_38 (BD3), SarahRose_37 (BD1), Snorlax_37 (BD1), Speedwell_43 (BD3), Sudan_39 (BD3), Sujidade_38 (BD1), SunsetPointe_37 (BD1), Superstar_41 (BD2), TagePhighter_39 (BD1), Tefunt_39 (BD2), Thestral_39 (BD2), TinaBelcher_38 (BD2), Toma_37 (BD1), Triste_37 (BD1), Triumph_39 (BD2), TrvxScott_37 (BD2), Unstoppable_37 (BD1), Verabelle_41 (BD3), Werner_37 (BD1), Whatever_37 (BD1), Zainub_40 (BD2), ZamZam_41 (BD3), Zemlya_39 (BD1), phiHau3_39 (BD4),

Start 9:
• Found in 1 of 88 (1.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Vanseggelen_43 (BD3),

Summary by clusters:

There are 4 clusters represented in this pham: BD4, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:
•Start number 5 was manually annotated 46 times for cluster BD1.

Info for manual annotations of cluster BD2:
•Start number 5 was manually annotated 22 times for cluster BD2.

Info for manual annotations of cluster BD3:
•Start number 5 was manually annotated 9 times for cluster BD3.

Info for manual annotations of cluster BD4:
•Start number 5 was manually annotated 3 times for cluster BD4.

Gene Information:
Gene: Aaronocolus_37 Start: 27413, Stop: 27565, Start Num: 5
Candidate Starts for Aaronocolus_37:
(Start: 5 @27413 has 80 MA's), (6, 27425), (20, 27545),

Gene: Alsaber_39 Start: 29286, Stop: 29435, Start Num: 5
Candidate Starts for Alsaber_39:
(Start: 5 @29286 has 80 MA's), (6, 29298), (15, 29394), (20, 29424), (21, 29430),

Gene: Alvy_40 Start: 28764, Stop: 28919, Start Num: 5
Candidate Starts for Alvy_40:
(4, 28707), (Start: 5 @28764 has 80 MA's), (20, 28905),

Gene: Amethyst_37 Start: 28135, Stop: 28287, Start Num: 5
Candidate Starts for Amethyst_37:
(1, 27754), (2, 27814), (Start: 5 @28135 has 80 MA's), (6, 28147), (7, 28159), (13, 28195), (20, 28273),

Gene: Andris_37 Start: 28193, Stop: 28342, Start Num: 5
Candidate Starts for Andris_37:

(Start: 5 @28193 has 80 MA's), (6, 28205), (15, 28301), (20, 28331),

Gene: Asten_37 Start: 27771, Stop: 27914, Start Num: 5
Candidate Starts for Asten_37:
(Start: 5 @27771 has 80 MA's), (6, 27783), (20, 27903), (21, 27909),

Gene: Axiom_38 Start: 28356, Stop: 28505, Start Num: 5
Candidate Starts for Axiom_38:
(Start: 5 @28356 has 80 MA's), (6, 28368), (7, 28380), (15, 28464), (20, 28494),

Gene: BarryBee_40 Start: 27781, Stop: 27924, Start Num: 5
Candidate Starts for BarryBee_40:
(Start: 5 @27781 has 80 MA's), (6, 27793), (20, 27913), (21, 27919),

Gene: BartholomewSD_40 Start: 28763, Stop: 28918, Start Num: 5
Candidate Starts for BartholomewSD_40:
(4, 28706), (Start: 5 @28763 has 80 MA's), (20, 28904),

Gene: BeardedLady_38 Start: 27666, Stop: 27818, Start Num: 5
Candidate Starts for BeardedLady_38:
(Start: 5 @27666 has 80 MA's), (6, 27678), (20, 27798),

Gene: Bovely_37 Start: 27419, Stop: 27571, Start Num: 5
Candidate Starts for Bovely_37:
(Start: 5 @27419 has 80 MA's), (6, 27431), (20, 27551),

Gene: Bowden_38 Start: 28679, Stop: 28834, Start Num: 5
Candidate Starts for Bowden_38:
(Start: 5 @28679 has 80 MA's), (20, 28820),

Gene: Brataylor_40 Start: 28755, Stop: 28907, Start Num: 5
Candidate Starts for Brataylor_40:
(Start: 5 @28755 has 80 MA's), (6, 28767), (10, 28785), (15, 28857),

Gene: BroPlease_38 Start: 27905, Stop: 28054, Start Num: 5
Candidate Starts for BroPlease_38:
(Start: 5 @27905 has 80 MA's), (7, 27929), (20, 28043),

Gene: BryanRecycles_38 Start: 27770, Stop: 27922, Start Num: 5
Candidate Starts for BryanRecycles_38:
(Start: 5 @27770 has 80 MA's), (6, 27782), (12, 27815), (20, 27902),

Gene: Caelum_39 Start: 28385, Stop: 28534, Start Num: 5
Candidate Starts for Caelum_39:
(Start: 5 @28385 has 80 MA's), (6, 28397), (7, 28409), (15, 28493), (18, 28517), (20, 28523), (21, 28529),

Gene: Caliburn_37 Start: 27396, Stop: 27548, Start Num: 5
Candidate Starts for Caliburn_37:
(Start: 5 @27396 has 80 MA's), (6, 27408), (20, 27528),

Gene: Celery_41 Start: 29219, Stop: 29368, Start Num: 5
Candidate Starts for Celery_41:

(Start: 5 @29219 has 80 MA's), (6, 29231), (7, 29243), (14, 29321), (17, 29348), (20, 29357), (21, 29363),

Gene: Celeste_38 Start: 28224, Stop: 28376, Start Num: 5
Candidate Starts for Celeste_38:
(Start: 5 @28224 has 80 MA's), (6, 28236), (10, 28254), (15, 28326),

Gene: Chucky_37 Start: 27785, Stop: 27928, Start Num: 5
Candidate Starts for Chucky_37:
(Start: 5 @27785 has 80 MA's), (6, 27797), (20, 27917), (21, 27923),

Gene: Conan_39 Start: 29180, Stop: 29329, Start Num: 5
Candidate Starts for Conan_39:
(Start: 5 @29180 has 80 MA's), (6, 29192), (15, 29288), (20, 29318), (21, 29324),

Gene: Danzina_39 Start: 28525, Stop: 28677, Start Num: 5
Candidate Starts for Danzina_39:
(Start: 5 @28525 has 80 MA's), (6, 28537), (10, 28555), (15, 28627),

Gene: Dattran_39 Start: 28331, Stop: 28483, Start Num: 5
Candidate Starts for Dattran_39:
(Start: 5 @28331 has 80 MA's), (6, 28343), (10, 28361), (15, 28433),

Gene: Dexers_37 Start: 29205, Stop: 29354, Start Num: 5
Candidate Starts for Dexers_37:
(Start: 5 @29205 has 80 MA's), (6, 29217), (7, 29229), (14, 29307), (15, 29313), (20, 29343), (21, 29349),

Gene: Dwayne_37 Start: 27772, Stop: 27915, Start Num: 5
Candidate Starts for Dwayne_37:
(Start: 5 @27772 has 80 MA's), (6, 27784), (20, 27904), (21, 27910),

Gene: Eddasa_38 Start: 27770, Stop: 27922, Start Num: 5
Candidate Starts for Eddasa_38:
(Start: 5 @27770 has 80 MA's), (6, 27782), (12, 27815), (20, 27902),

Gene: ElGato_39 Start: 28844, Stop: 28993, Start Num: 5
Candidate Starts for ElGato_39:
(Start: 5 @28844 has 80 MA's), (6, 28856), (15, 28952), (20, 28982), (21, 28988),

Gene: Emaanora_40 Start: 27730, Stop: 27873, Start Num: 5
Candidate Starts for Emaanora_40:
(Start: 5 @27730 has 80 MA's), (6, 27742), (20, 27862), (21, 27868),

Gene: EnochSoames_40 Start: 27765, Stop: 27917, Start Num: 5
Candidate Starts for EnochSoames_40:
(Start: 5 @27765 has 80 MA's), (6, 27777), (12, 27810), (20, 27897),

Gene: Esperer_37 Start: 27232, Stop: 27384, Start Num: 5
Candidate Starts for Esperer_37:
(Start: 5 @27232 has 80 MA's), (6, 27244), (20, 27364),

Gene: Goby_37 Start: 28230, Stop: 28382, Start Num: 5

Candidate Starts for Goby_37:
(Start: 5 @28230 has 80 MA's), (6, 28242), (10, 28260), (15, 28332),

Gene: Godpower_38 Start: 28225, Stop: 28377, Start Num: 5
Candidate Starts for Godpower_38:
(Start: 5 @28225 has 80 MA's), (6, 28237), (10, 28255), (15, 28327),

Gene: GreenWeasel_39 Start: 27912, Stop: 28061, Start Num: 5
Candidate Starts for GreenWeasel_39:
(Start: 5 @27912 has 80 MA's), (7, 27936), (20, 28050),

Gene: Haizum_39 Start: 28476, Stop: 28631, Start Num: 5
Candidate Starts for Haizum_39:
(Start: 5 @28476 has 80 MA's), (12, 28530), (20, 28617),

Gene: Hydra_39 Start: 27944, Stop: 28096, Start Num: 5
Candidate Starts for Hydra_39:
(Start: 5 @27944 has 80 MA's), (6, 27956), (20, 28076),

Gene: Indigo_36 Start: 27412, Stop: 27564, Start Num: 5
Candidate Starts for Indigo_36:
(Start: 5 @27412 has 80 MA's), (6, 27424), (20, 27544),

Gene: Issmi_39 Start: 29076, Stop: 29228, Start Num: 5
Candidate Starts for Issmi_39:
(Start: 5 @29076 has 80 MA's), (6, 29088), (7, 29100), (15, 29184), (20, 29214),

Gene: Izzy_38 Start: 27817, Stop: 27969, Start Num: 5
Candidate Starts for Izzy_38:
(Start: 5 @27817 has 80 MA's), (6, 27829), (12, 27862), (20, 27949),

Gene: Jash_38 Start: 27770, Stop: 27922, Start Num: 5
Candidate Starts for Jash_38:
(Start: 5 @27770 has 80 MA's), (6, 27782), (12, 27815), (20, 27902),

Gene: Jevington_40 Start: 28867, Stop: 29019, Start Num: 5
Candidate Starts for Jevington_40:
(Start: 5 @28867 has 80 MA's), (7, 28891), (11, 28915), (20, 29005),

Gene: Jhitchelle_39 Start: 28718, Stop: 28867, Start Num: 5
Candidate Starts for Jhitchelle_39:
(Start: 5 @28718 has 80 MA's), (6, 28730), (7, 28742), (14, 28820), (15, 28826), (20, 28856), (21, 28862),

Gene: Kaine_38 Start: 28995, Stop: 29144, Start Num: 5
Candidate Starts for Kaine_38:
(Start: 5 @28995 has 80 MA's), (6, 29007), (15, 29103), (20, 29133), (21, 29139),

Gene: Legacy_37 Start: 27387, Stop: 27539, Start Num: 5
Candidate Starts for Legacy_37:
(Start: 5 @27387 has 80 MA's), (6, 27399), (20, 27519),

Gene: Leviticus_37 Start: 27416, Stop: 27568, Start Num: 5

Candidate Starts for Leviticus_37:
(Start: 5 @27416 has 80 MA's), (6, 27428), (20, 27548),

Gene: Lika_37 Start: 28228, Stop: 28380, Start Num: 5
Candidate Starts for Lika_37:
(Start: 5 @28228 has 80 MA's), (6, 28240), (10, 28258), (15, 28330),

Gene: Lorelei_38 Start: 28287, Stop: 28433, Start Num: 5
Candidate Starts for Lorelei_38:
(Start: 5 @28287 has 80 MA's), (6, 28299), (19, 28419), (20, 28422), (21, 28428),

Gene: Marav_41 Start: 29192, Stop: 29344, Start Num: 5
Candidate Starts for Marav_41:
(Start: 5 @29192 has 80 MA's), (7, 29216), (20, 29330),

Gene: Nabi_38 Start: 28287, Stop: 28433, Start Num: 5
Candidate Starts for Nabi_38:
(Start: 5 @28287 has 80 MA's), (6, 28299), (19, 28419), (20, 28422), (21, 28428),

Gene: Nanodon_39 Start: 28056, Stop: 28208, Start Num: 5
Candidate Starts for Nanodon_39:
(Start: 5 @28056 has 80 MA's), (6, 28068), (15, 28158), (16, 28170), (20, 28188),

Gene: Nerdos_36 Start: 27411, Stop: 27563, Start Num: 5
Candidate Starts for Nerdos_36:
(Start: 5 @27411 has 80 MA's), (6, 27423), (20, 27543),

Gene: Nishikigoi_39 Start: 28476, Stop: 28631, Start Num: 5
Candidate Starts for Nishikigoi_39:
(Start: 5 @28476 has 80 MA's), (12, 28530), (20, 28617),

Gene: Oliynyk_38 Start: 27770, Stop: 27922, Start Num: 5
Candidate Starts for Oliynyk_38:
(Start: 5 @27770 has 80 MA's), (6, 27782), (12, 27815), (20, 27902),

Gene: Omar_40 Start: 28704, Stop: 28856, Start Num: 5
Candidate Starts for Omar_40:
(Start: 5 @28704 has 80 MA's), (15, 28812), (20, 28842),

Gene: Ozzie_37 Start: 27396, Stop: 27548, Start Num: 5
Candidate Starts for Ozzie_37:
(Start: 5 @27396 has 80 MA's), (6, 27408), (20, 27528),

Gene: OzzyJ_38 Start: 27772, Stop: 27915, Start Num: 5
Candidate Starts for OzzyJ_38:
(Start: 5 @27772 has 80 MA's), (6, 27784), (20, 27904), (21, 27910),

Gene: Pablito_37 Start: 28027, Stop: 28164, Start Num: 5
Candidate Starts for Pablito_37:
(2, 27706), (Start: 5 @28027 has 80 MA's), (20, 28153),

Gene: Paolo_40 Start: 29046, Stop: 29201, Start Num: 5
Candidate Starts for Paolo_40:

(Start: 5 @29046 has 80 MA's), (20, 29187),

Gene: Pavo_39 Start: 29453, Stop: 29602, Start Num: 5
Candidate Starts for Pavo_39:
(Start: 5 @29453 has 80 MA's), (6, 29465), (15, 29561), (20, 29591), (21, 29597),

Gene: Phettuccine_37 Start: 27412, Stop: 27564, Start Num: 5
Candidate Starts for Phettuccine_37:
(Start: 5 @27412 has 80 MA's), (6, 27424), (20, 27544),

Gene: Provolone_39 Start: 28835, Stop: 28984, Start Num: 5
Candidate Starts for Provolone_39:
(Start: 5 @28835 has 80 MA's), (6, 28847), (15, 28943), (20, 28973), (21, 28979),

Gene: Puginator_40 Start: 29067, Stop: 29222, Start Num: 5
Candidate Starts for Puginator_40:
(Start: 5 @29067 has 80 MA's), (20, 29208),

Gene: Rana_38 Start: 28287, Stop: 28433, Start Num: 5
Candidate Starts for Rana_38:
(Start: 5 @28287 has 80 MA's), (6, 28299), (19, 28419), (20, 28422), (21, 28428),

Gene: Rusticus_38 Start: 27770, Stop: 27922, Start Num: 5
Candidate Starts for Rusticus_38:
(Start: 5 @27770 has 80 MA's), (6, 27782), (12, 27815), (20, 27902),

Gene: Saftant_38 Start: 29408, Stop: 29557, Start Num: 5
Candidate Starts for Saftant_38:
(Start: 5 @29408 has 80 MA's), (6, 29420), (7, 29432), (14, 29510), (20, 29546), (21, 29552),

Gene: SarahRose_37 Start: 27780, Stop: 27923, Start Num: 5
Candidate Starts for SarahRose_37:
(Start: 5 @27780 has 80 MA's), (6, 27792), (20, 27912), (21, 27918),

Gene: Snorlax_37 Start: 27784, Stop: 27927, Start Num: 5
Candidate Starts for Snorlax_37:
(Start: 5 @27784 has 80 MA's), (6, 27796), (20, 27916), (21, 27922),

Gene: Speedwell_43 Start: 30704, Stop: 30853, Start Num: 5
Candidate Starts for Speedwell_43:
(3, 30485), (Start: 5 @30704 has 80 MA's), (6, 30716), (7, 30728), (14, 30806), (15, 30812), (20, 30842), (21, 30848),

Gene: Sudan_39 Start: 29282, Stop: 29431, Start Num: 5
Candidate Starts for Sudan_39:
(Start: 5 @29282 has 80 MA's), (6, 29294), (15, 29390), (20, 29420), (21, 29426),

Gene: Sujidade_38 Start: 28513, Stop: 28665, Start Num: 5
Candidate Starts for Sujidade_38:
(Start: 5 @28513 has 80 MA's), (6, 28525), (10, 28543), (15, 28615),

Gene: SunsetPointe_37 Start: 27403, Stop: 27555, Start Num: 5
Candidate Starts for SunsetPointe_37:

(Start: 5 @27403 has 80 MA's), (6, 27415), (20, 27535),

Gene: Superstar_41 Start: 29591, Stop: 29740, Start Num: 5
Candidate Starts for Superstar_41:
(Start: 5 @29591 has 80 MA's), (6, 29603), (7, 29615), (20, 29729),

Gene: TagePhighter_39 Start: 27784, Stop: 27927, Start Num: 5
Candidate Starts for TagePhighter_39:
(Start: 5 @27784 has 80 MA's), (6, 27796), (20, 27916), (21, 27922),

Gene: Tefunt_39 Start: 28478, Stop: 28633, Start Num: 5
Candidate Starts for Tefunt_39:
(Start: 5 @28478 has 80 MA's), (12, 28532), (20, 28619),

Gene: Thestral_39 Start: 28671, Stop: 28826, Start Num: 5
Candidate Starts for Thestral_39:
(Start: 5 @28671 has 80 MA's), (20, 28812),

Gene: TinaBelcher_38 Start: 28618, Stop: 28773, Start Num: 5
Candidate Starts for TinaBelcher_38:
(Start: 5 @28618 has 80 MA's), (20, 28759),

Gene: Toma_37 Start: 28230, Stop: 28382, Start Num: 5
Candidate Starts for Toma_37:
(Start: 5 @28230 has 80 MA's), (6, 28242), (10, 28260), (15, 28332),

Gene: Triste_37 Start: 27772, Stop: 27915, Start Num: 5
Candidate Starts for Triste_37:
(Start: 5 @27772 has 80 MA's), (6, 27784), (20, 27904), (21, 27910),

Gene: Triumph_39 Start: 28373, Stop: 28522, Start Num: 5
Candidate Starts for Triumph_39:
(Start: 5 @28373 has 80 MA's), (6, 28385), (7, 28397), (15, 28481), (20, 28511),

Gene: TrvxScott_37 Start: 28664, Stop: 28819, Start Num: 5
Candidate Starts for TrvxScott_37:
(Start: 5 @28664 has 80 MA's), (20, 28805),

Gene: Unstoppable_37 Start: 27407, Stop: 27559, Start Num: 5
Candidate Starts for Unstoppable_37:
(Start: 5 @27407 has 80 MA's), (6, 27419), (20, 27539),

Gene: Vanseggelen_43 Start: 28966, Stop: 29085, Start Num: 9
Candidate Starts for Vanseggelen_43:
(8, 28963), (9, 28966), (20, 29074), (21, 29080),

Gene: Verabelle_41 Start: 29352, Stop: 29495, Start Num: 5
Candidate Starts for Verabelle_41:
(Start: 5 @29352 has 80 MA's), (6, 29364), (15, 29454), (17, 29475), (20, 29484), (21, 29490),

Gene: Werner_37 Start: 27782, Stop: 27925, Start Num: 5
Candidate Starts for Werner_37:
(Start: 5 @27782 has 80 MA's), (6, 27794), (20, 27914), (21, 27920),

Gene: Whatever_37 Start: 27782, Stop: 27925, Start Num: 5
Candidate Starts for Whatever_37:
(Start: 5 @27782 has 80 MA's), (6, 27794), (20, 27914), (21, 27920),

Gene: Zainub_40 Start: 29007, Stop: 29162, Start Num: 5
Candidate Starts for Zainub_40:
(Start: 5 @29007 has 80 MA's), (20, 29148),

Gene: ZamZam_41 Start: 29381, Stop: 29530, Start Num: 5
Candidate Starts for ZamZam_41:
(Start: 5 @29381 has 80 MA's), (6, 29393), (7, 29405), (14, 29483), (15, 29489), (20, 29519), (21, 29525),

Gene: Zemlya_39 Start: 28331, Stop: 28483, Start Num: 5
Candidate Starts for Zemlya_39:
(Start: 5 @28331 has 80 MA's), (6, 28343), (10, 28361), (15, 28433),

Gene: phiHau3_39 Start: 27877, Stop: 28026, Start Num: 5
Candidate Starts for phiHau3_39:
(Start: 5 @27877 has 80 MA's), (6, 27889), (20, 28015),