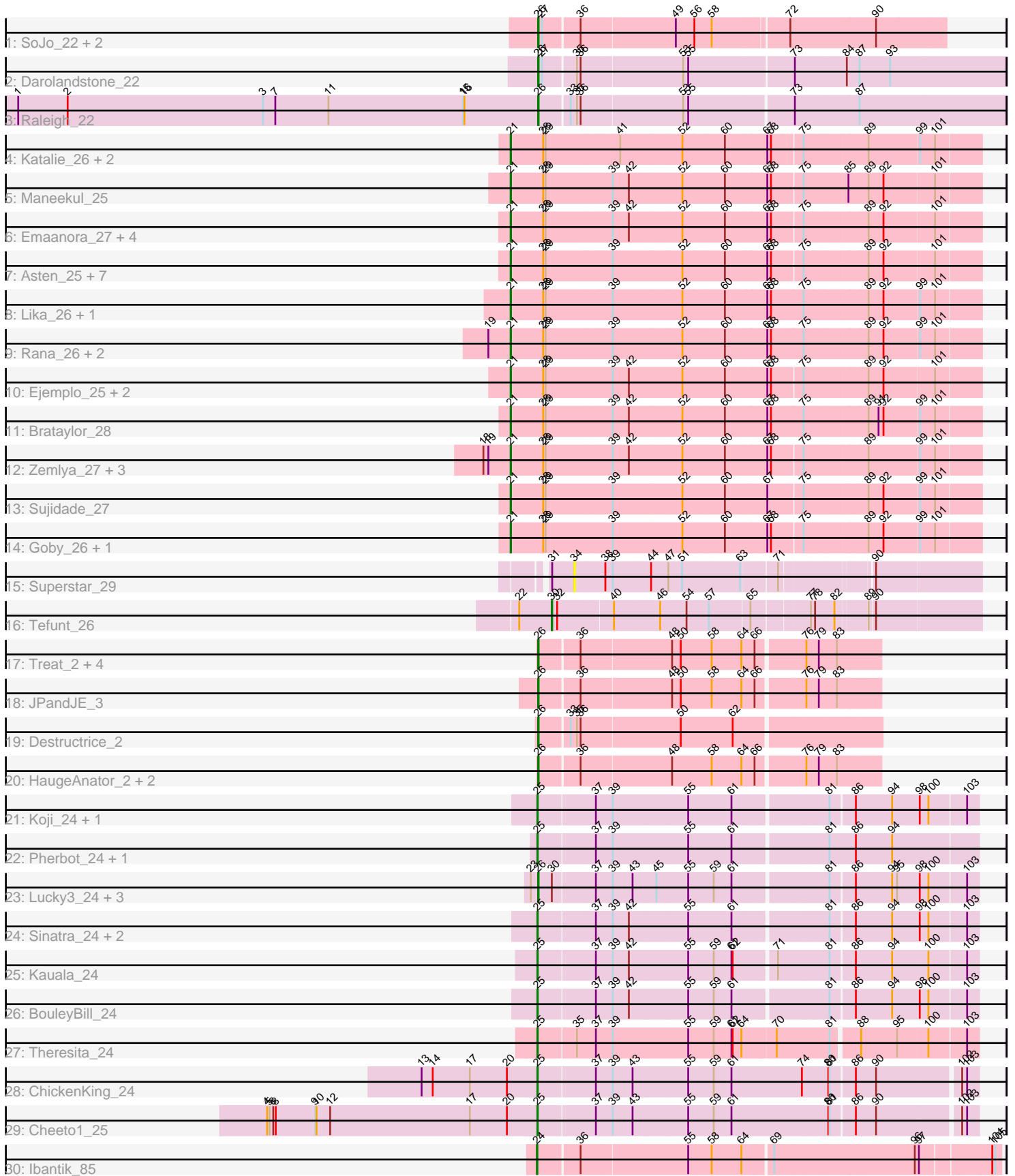


Pham 311572



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 311572 Report

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

Pham number 311572 has 67 members, 3 are drafts.

Phages represented in each track:

- Track 1 : SoJo_22, Tubberson_22, DaRealMyers_22
- Track 2 : Darolandstone_22
- Track 3 : Raleigh_22
- Track 4 : Katalie_26, RedBear_27, South40_26
- Track 5 : Maneekul_25
- Track 6 : Emaanora_27, Dwayne_25, OzzyJ_26, Hippo_25, SarahRose_25
- Track 7 : Asten_25, TagePhighter_26, Triste_25, BarryBee_27, Snorlax_25, Whatever_25, Chucky_25, Werner_25
- Track 8 : Lika_26, Godpower_27
- Track 9 : Rana_26, Lorelei_26, Nabi_26
- Track 10 : Ejemplo_25, Yasdnih_25, TuanPN_25
- Track 11 : Brataylor_28
- Track 12 : Zemlya_27, Danzina_27, Celeste_26, Dattran_27
- Track 13 : Sujidade_27
- Track 14 : Goby_26, Toma_26
- Track 15 : Superstar_29
- Track 16 : Tefunt_26
- Track 17 : Treat_2, Percastrophe_2, Romero_2, Immanuel3_2, ToriToki_2
- Track 18 : JPandJE_3
- Track 19 : Destructrice_2
- Track 20 : HaugeAnator_2, ZooBear_2, Olicious_2
- Track 21 : Koji_24, RenegadeRaider_25
- Track 22 : Pherbot_24, Bustleton_24
- Track 23 : Lucky3_24, SirVictor_24, Guetzie_24, Golden_24
- Track 24 : Sinatra_24, Jingles_24, PrincePhergus_24
- Track 25 : Kauala_24
- Track 26 : BouleyBill_24
- Track 27 : Theresita_24
- Track 28 : ChickenKing_24
- Track 29 : Cheeto1_25
- Track 30 : Ibantik_85

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

The start number called the most often in the published annotations is 21, it was called in 33 of the 64 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Asten_25, BarryBee_27, Brataylor_28, Celeste_26, Chucky_25, Danzina_27, Dattran_27, Dwayne_25, Ejemplo_25, Emaanora_27, Goby_26, Godpower_27, Hippo_25, Katalie_26, Lika_26, Lorelei_26, Maneekul_25, Nabi_26, OzzyJ_26, Rana_26, RedBear_27, SarahRose_25, Snorlax_25, South40_26, Sujidade_27, TagePhighter_26, Toma_26, Triste_25, TuanPN_25, Werner_25, Whatever_25, Yasdnil_25, Zemlya_27,

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

-

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

- BouleyBill_24, Bustleton_24, Cheeto1_25, ChickenKing_24, DaRealMyers_22, Darolandstone_22, Destructrice_2, Golden_24, Guetzie_24, HaugeAnator_2, Ibantik_85, Immanuel3_2, JPandJE_3, Jingles_24, Kauala_24, Koji_24, Lucky3_24, Olicious_2, Percastrophe_2, Pherbot_24, PrincePhergus_24, Raleigh_22, RenegadeRaider_25, Romero_2, Sinatra_24, SirVictor_24, SoJo_22, Superstar_29, Tefunt_26, Theresita_24, ToriToki_2, Treat_2, Tubberson_22, ZooBear_2,

Summary by start number:

Start 21:

- Found in 33 of 67 (49.3%) of genes in pham
- Manual Annotations of this start: 33 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asten_25 (BD1), BarryBee_27 (BD1), Brataylor_28 (BD1), Celeste_26 (BD1), Chucky_25 (BD1), Danzina_27 (BD1), Dattran_27 (BD1), Dwayne_25 (BD1), Ejemplo_25 (BD1), Emaanora_27 (BD1), Goby_26 (BD1), Godpower_27 (BD1), Hippo_25 (BD1), Katalie_26 (BD1), Lika_26 (BD1), Lorelei_26 (BD1), Maneekul_25 (BD1), Nabi_26 (BD1), OzzyJ_26 (BD1), Rana_26 (BD1), RedBear_27 (BD1), SarahRose_25 (BD1), Snorlax_25 (BD1), South40_26 (BD1), Sujidade_27 (BD1), TagePhighter_26 (BD1), Toma_26 (BD1), Triste_25 (BD1), TuanPN_25 (BD1), Werner_25 (BD1), Whatever_25 (BD1), Yasdnil_25 (BD1), Zemlya_27 (BD1),

Start 24:

- Found in 1 of 67 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_85 (singleton),

Start 25:

- Found in 12 of 67 (17.9%) of genes in pham
- Manual Annotations of this start: 11 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BouleyBill_24 (EA4), Bustleton_24 (EA4), Cheeto1_25 (EA9), ChickenKing_24 (EA9), Jingles_24 (EA4), Kauala_24 (EA4), Koji_24 (EA4), Pherbot_24 (EA4), PrincePhergus_24 (EA4), RenegadeRaider_25 (EA4), Sinatra_24 (EA4), Theresita_24 (EA7),

Start 26:

- Found in 19 of 67 (28.4%) of genes in pham
- Manual Annotations of this start: 18 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DaRealMyers_22 (BC1), Darolandstone_22 (BC2), Destructrice_2 (BF), Golden_24 (EA4), Guetzie_24 (EA4), HaugeAnator_2 (BF), Immanuel3_2 (BF), JPandJE_3 (BF), Lucky3_24 (EA4), Olicious_2 (BF), Percastrophe_2 (BF), Raleigh_22 (BC2), Romero_2 (BF), SirVictor_24 (EA4), SoJo_22 (BC1), ToriToki_2 (BF), Treat_2 (BF), Tubberson_22 (BC1), ZooBear_2 (BF),

Start 30:

- Found in 5 of 67 (7.5%) of genes in pham
- Manual Annotations of this start: 1 of 64
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Tefunt_26 (BD2),

Start 34:

- Found in 1 of 67 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Superstar_29 (BD2),

Summary by clusters:

There are 9 clusters represented in this pham: BF, singleton, BC1, EA9, BD1, BC2, BD2, EA4, EA7,

Info for manual annotations of cluster BC1:

- Start number 26 was manually annotated 2 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 26 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BD1:

- Start number 21 was manually annotated 33 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 30 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BF:

- Start number 26 was manually annotated 10 times for cluster BF.

Info for manual annotations of cluster EA4:

- Start number 25 was manually annotated 8 times for cluster EA4.
- Start number 26 was manually annotated 4 times for cluster EA4.

Info for manual annotations of cluster EA7:

- Start number 25 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA9:

- Start number 25 was manually annotated 2 times for cluster EA9.

Gene Information:

Gene: Asten_25 Start: 21080, Stop: 22168, Start Num: 21

Candidate Starts for Asten_25:

(Start: 21 @21080 has 33 MA's), (28, 21158), (29, 21164), (39, 21320), (52, 21485), (60, 21581), (67, 21680), (68, 21689), (75, 21761), (89, 21905), (92, 21941), (101, 22061),

Gene: BarryBee_27 Start: 21090, Stop: 22178, Start Num: 21

Candidate Starts for BarryBee_27:

(Start: 21 @21090 has 33 MA's), (28, 21168), (29, 21174), (39, 21330), (52, 21495), (60, 21591), (67, 21690), (68, 21699), (75, 21771), (89, 21915), (92, 21951), (101, 22071),

Gene: BouleyBill_24 Start: 18629, Stop: 19621, Start Num: 25

Candidate Starts for BouleyBill_24:

(Start: 25 @18629 has 11 MA's), (37, 18758), (39, 18791), (42, 18830), (55, 18971), (59, 19031), (61, 19073), (81, 19286), (86, 19337), (94, 19424), (98, 19487), (100, 19508), (103, 19595),

Gene: Brataylor_28 Start: 22093, Stop: 23187, Start Num: 21

Candidate Starts for Brataylor_28:

(Start: 21 @22093 has 33 MA's), (28, 22171), (29, 22177), (39, 22333), (42, 22372), (52, 22498), (60, 22594), (67, 22693), (68, 22702), (75, 22777), (89, 22924), (91, 22948), (92, 22960), (99, 23044), (101, 23080),

Gene: Bustleton_24 Start: 18617, Stop: 19621, Start Num: 25

Candidate Starts for Bustleton_24:

(Start: 25 @18617 has 11 MA's), (37, 18746), (39, 18779), (55, 18959), (61, 19061), (81, 19274), (86, 19337), (94, 19424),

Gene: Celeste_26 Start: 21546, Stop: 22634, Start Num: 21

Candidate Starts for Celeste_26:

(18, 21483), (19, 21495), (Start: 21 @21546 has 33 MA's), (28, 21624), (29, 21630), (39, 21786), (42, 21825), (52, 21951), (60, 22047), (67, 22146), (68, 22155), (75, 22227), (89, 22371), (99, 22491), (101, 22527),

Gene: Cheeto1_25 Start: 18442, Stop: 19443, Start Num: 25

Candidate Starts for Cheeto1_25:

(4, 17788), (5, 17794), (6, 17803), (8, 17809), (9, 17905), (10, 17908), (12, 17941), (17, 18280), (20, 18370), (Start: 25 @18442 has 11 MA's), (37, 18571), (39, 18604), (43, 18652), (55, 18784), (59, 18844), (61, 18886), (80, 19111), (81, 19114), (86, 19168), (90, 19216), (102, 19405), (103, 19417),

Gene: ChickenKing_24 Start: 18340, Stop: 19338, Start Num: 25

Candidate Starts for ChickenKing_24:

(13, 18061), (14, 18088), (17, 18178), (20, 18268), (Start: 25 @18340 has 11 MA's), (37, 18469), (39, 18502), (43, 18550), (55, 18682), (59, 18742), (61, 18784), (74, 18946), (80, 19006), (81, 19009), (86, 19063), (90, 19111), (102, 19300), (103, 19312),

Gene: Chucky_25 Start: 21094, Stop: 22182, Start Num: 21

Candidate Starts for Chucky_25:

(Start: 21 @21094 has 33 MA's), (28, 21172), (29, 21178), (39, 21334), (52, 21499), (60, 21595), (67, 21694), (68, 21703), (75, 21775), (89, 21919), (92, 21955), (101, 22075),

Gene: DaRealMyers_22 Start: 18309, Stop: 19253, Start Num: 26

Candidate Starts for DaRealMyers_22:

(Start: 26 @18309 has 18 MA's), (27, 18318), (36, 18402), (49, 18624), (56, 18666), (58, 18708), (72, 18885), (90, 19086),

Gene: Danzina_27 Start: 21847, Stop: 22935, Start Num: 21

Candidate Starts for Danzina_27:

(18, 21784), (19, 21796), (Start: 21 @21847 has 33 MA's), (28, 21925), (29, 21931), (39, 22087), (42, 22126), (52, 22252), (60, 22348), (67, 22447), (68, 22456), (75, 22528), (89, 22672), (99, 22792), (101, 22828),

Gene: Darolandstone_22 Start: 18382, Stop: 19467, Start Num: 26

Candidate Starts for Darolandstone_22:

(Start: 26 @18382 has 18 MA's), (27, 18391), (35, 18466), (36, 18475), (53, 18715), (55, 18727), (73, 18970), (84, 19087), (87, 19117), (93, 19186),

Gene: Dattran_27 Start: 21656, Stop: 22744, Start Num: 21

Candidate Starts for Dattran_27:

(18, 21593), (19, 21605), (Start: 21 @21656 has 33 MA's), (28, 21734), (29, 21740), (39, 21896), (42, 21935), (52, 22061), (60, 22157), (67, 22256), (68, 22265), (75, 22337), (89, 22481), (99, 22601), (101, 22637),

Gene: Destructrice_2 Start: 2633, Stop: 3406, Start Num: 26

Candidate Starts for Destructrice_2:

(Start: 26 @2633 has 18 MA's), (33, 2699), (35, 2714), (36, 2723), (50, 2957), (62, 3080),

Gene: Dwayne_25 Start: 21081, Stop: 22169, Start Num: 21

Candidate Starts for Dwayne_25:

(Start: 21 @21081 has 33 MA's), (28, 21159), (29, 21165), (39, 21321), (42, 21360), (52, 21486), (60, 21582), (67, 21681), (68, 21690), (75, 21762), (89, 21906), (92, 21942), (101, 22062),

Gene: Ejemplo_25 Start: 21116, Stop: 22204, Start Num: 21

Candidate Starts for Ejemplo_25:

(Start: 21 @21116 has 33 MA's), (28, 21194), (29, 21200), (39, 21356), (42, 21395), (52, 21521), (60, 21617), (67, 21716), (68, 21725), (75, 21794), (89, 21941), (92, 21977), (101, 22097),

Gene: Emaanora_27 Start: 21039, Stop: 22127, Start Num: 21

Candidate Starts for Emaanora_27:

(Start: 21 @21039 has 33 MA's), (28, 21117), (29, 21123), (39, 21279), (42, 21318), (52, 21444), (60, 21540), (67, 21639), (68, 21648), (75, 21720), (89, 21864), (92, 21900), (101, 22020),

Gene: Goby_26 Start: 21661, Stop: 22749, Start Num: 21

Candidate Starts for Goby_26:

(Start: 21 @21661 has 33 MA's), (28, 21739), (29, 21745), (39, 21901), (52, 22066), (60, 22162), (67, 22261), (68, 22270), (75, 22342), (89, 22486), (92, 22522), (99, 22606), (101, 22642),

Gene: Godpower_27 Start: 21654, Stop: 22748, Start Num: 21

Candidate Starts for Godpower_27:

(Start: 21 @21654 has 33 MA's), (28, 21732), (29, 21738), (39, 21894), (52, 22059), (60, 22155), (67, 22254), (68, 22263), (75, 22341), (89, 22485), (92, 22521), (99, 22605), (101, 22641),

Gene: Golden_24 Start: 18704, Stop: 19696, Start Num: 26

Candidate Starts for Golden_24:

(23, 18686), (Start: 26 @18704 has 18 MA's), (Start: 30 @18734 has 1 MA's), (37, 18830), (39, 18863), (43, 18911), (45, 18968), (55, 19043), (59, 19103), (61, 19145), (81, 19358), (86, 19412), (94, 19499), (95, 19511), (98, 19562), (100, 19583), (103, 19670),

Gene: Guetzie_24 Start: 18692, Stop: 19684, Start Num: 26

Candidate Starts for Guetzie_24:

(23, 18674), (Start: 26 @18692 has 18 MA's), (Start: 30 @18722 has 1 MA's), (37, 18818), (39, 18851), (43, 18899), (45, 18956), (55, 19031), (59, 19091), (61, 19133), (81, 19346), (86, 19400), (94, 19487), (95, 19499), (98, 19550), (100, 19571), (103, 19658),

Gene: HaugeAnator_2 Start: 2660, Stop: 3421, Start Num: 26

Candidate Starts for HaugeAnator_2:

(Start: 26 @2660 has 18 MA's), (36, 2747), (48, 2960), (58, 3053), (64, 3122), (66, 3149), (76, 3251), (79, 3278), (83, 3320),

Gene: Hippo_25 Start: 21090, Stop: 22178, Start Num: 21

Candidate Starts for Hippo_25:

(Start: 21 @21090 has 33 MA's), (28, 21168), (29, 21174), (39, 21330), (42, 21369), (52, 21495), (60, 21591), (67, 21690), (68, 21699), (75, 21771), (89, 21915), (92, 21951), (101, 22071),

Gene: lbantik_85 Start: 47789, Stop: 48844, Start Num: 24

Candidate Starts for lbantik_85:

(Start: 24 @47789 has 1 MA's), (36, 47882), (55, 48134), (58, 48188), (64, 48260), (69, 48326), (96, 48653), (97, 48662), (104, 48824), (105, 48830),

Gene: Immanuel3_2 Start: 2661, Stop: 3425, Start Num: 26

Candidate Starts for Immanuel3_2:

(Start: 26 @2661 has 18 MA's), (36, 2751), (48, 2964), (50, 2985), (58, 3057), (64, 3126), (66, 3153), (76, 3255), (79, 3282), (83, 3324),

Gene: JPandJE_3 Start: 3017, Stop: 3781, Start Num: 26

Candidate Starts for JPandJE_3:

(Start: 26 @3017 has 18 MA's), (36, 3107), (48, 3320), (50, 3341), (58, 3413), (64, 3482), (66, 3509), (76, 3611), (79, 3638), (83, 3680),

Gene: Jingles_24 Start: 18630, Stop: 19625, Start Num: 25

Candidate Starts for Jingles_24:

(Start: 25 @18630 has 11 MA's), (37, 18759), (39, 18792), (42, 18831), (55, 18972), (61, 19074), (81, 19287), (86, 19341), (94, 19428), (98, 19491), (100, 19512), (103, 19599),

Gene: Katalie_26 Start: 21379, Stop: 22464, Start Num: 21

Candidate Starts for Katalie_26:

(Start: 21 @21379 has 33 MA's), (28, 21457), (29, 21463), (41, 21637), (52, 21784), (60, 21880), (67, 21979), (68, 21988), (75, 22054), (89, 22201), (99, 22321), (101, 22357),

Gene: Kauala_24 Start: 18628, Stop: 19623, Start Num: 25

Candidate Starts for Kauala_24:

(Start: 25 @18628 has 11 MA's), (37, 18757), (39, 18790), (42, 18829), (55, 18970), (59, 19030), (61, 19072), (62, 19075), (71, 19168), (81, 19285), (86, 19339), (94, 19426), (100, 19510), (103, 19597),

Gene: Koji_24 Start: 18752, Stop: 19747, Start Num: 25

Candidate Starts for Koji_24:

(Start: 25 @18752 has 11 MA's), (37, 18881), (39, 18914), (55, 19094), (61, 19196), (81, 19409), (86, 19463), (94, 19550), (98, 19613), (100, 19634), (103, 19721),

Gene: Lika_26 Start: 21658, Stop: 22752, Start Num: 21

Candidate Starts for Lika_26:

(Start: 21 @21658 has 33 MA's), (28, 21736), (29, 21742), (39, 21898), (52, 22063), (60, 22159), (67, 22258), (68, 22267), (75, 22345), (89, 22489), (92, 22525), (99, 22609), (101, 22645),

Gene: Lorelei_26 Start: 21627, Stop: 22721, Start Num: 21

Candidate Starts for Lorelei_26:

(19, 21576), (Start: 21 @21627 has 33 MA's), (28, 21705), (29, 21711), (39, 21867), (52, 22032), (60, 22128), (67, 22227), (68, 22236), (75, 22311), (89, 22458), (92, 22494), (99, 22578), (101, 22614),

Gene: Lucky3_24 Start: 18704, Stop: 19696, Start Num: 26

Candidate Starts for Lucky3_24:

(23, 18686), (Start: 26 @18704 has 18 MA's), (Start: 30 @18734 has 1 MA's), (37, 18830), (39, 18863), (43, 18911), (45, 18968), (55, 19043), (59, 19103), (61, 19145), (81, 19358), (86, 19412), (94, 19499), (95, 19511), (98, 19562), (100, 19583), (103, 19670),

Gene: Maneekul_25 Start: 21115, Stop: 22203, Start Num: 21

Candidate Starts for Maneekul_25:

(Start: 21 @21115 has 33 MA's), (28, 21193), (29, 21199), (39, 21355), (42, 21394), (52, 21520), (60, 21616), (67, 21715), (68, 21724), (75, 21793), (85, 21895), (89, 21940), (92, 21976), (101, 22096),

Gene: Nabi_26 Start: 21627, Stop: 22721, Start Num: 21

Candidate Starts for Nabi_26:

(19, 21576), (Start: 21 @21627 has 33 MA's), (28, 21705), (29, 21711), (39, 21867), (52, 22032), (60, 22128), (67, 22227), (68, 22236), (75, 22311), (89, 22458), (92, 22494), (99, 22578), (101, 22614),

Gene: Olicious_2 Start: 2660, Stop: 3421, Start Num: 26

Candidate Starts for Olicious_2:

(Start: 26 @2660 has 18 MA's), (36, 2747), (48, 2960), (58, 3053), (64, 3122), (66, 3149), (76, 3251), (79, 3278), (83, 3320),

Gene: OzzyJ_26 Start: 21081, Stop: 22169, Start Num: 21

Candidate Starts for OzzyJ_26:

(Start: 21 @21081 has 33 MA's), (28, 21159), (29, 21165), (39, 21321), (42, 21360), (52, 21486), (60, 21582), (67, 21681), (68, 21690), (75, 21762), (89, 21906), (92, 21942), (101, 22062),

Gene: Percastrophe_2 Start: 2650, Stop: 3414, Start Num: 26

Candidate Starts for Percastrophe_2:

(Start: 26 @2650 has 18 MA's), (36, 2740), (48, 2953), (50, 2974), (58, 3046), (64, 3115), (66, 3142), (76, 3244), (79, 3271), (83, 3313),

Gene: Pherbot_24 Start: 18616, Stop: 19620, Start Num: 25

Candidate Starts for Pherbot_24:

(Start: 25 @18616 has 11 MA's), (37, 18745), (39, 18778), (55, 18958), (61, 19060), (81, 19273), (86, 19336), (94, 19423),

Gene: PrincePhergus_24 Start: 18622, Stop: 19617, Start Num: 25

Candidate Starts for PrincePhergus_24:

(Start: 25 @18622 has 11 MA's), (37, 18751), (39, 18784), (42, 18823), (55, 18964), (61, 19066), (81, 19279), (86, 19333), (94, 19420), (98, 19483), (100, 19504), (103, 19591),

Gene: Raleigh_22 Start: 18601, Stop: 19683, Start Num: 26

Candidate Starts for Raleigh_22:

(1, 17341), (2, 17461), (3, 17935), (7, 17965), (11, 18094), (15, 18421), (16, 18424), (Start: 26 @18601 has 18 MA's), (33, 18670), (35, 18685), (36, 18694), (53, 18934), (55, 18946), (73, 19186), (87, 19333),

Gene: Rana_26 Start: 21627, Stop: 22721, Start Num: 21

Candidate Starts for Rana_26:

(19, 21576), (Start: 21 @21627 has 33 MA's), (28, 21705), (29, 21711), (39, 21867), (52, 22032), (60, 22128), (67, 22227), (68, 22236), (75, 22311), (89, 22458), (92, 22494), (99, 22578), (101, 22614),

Gene: RedBear_27 Start: 21379, Stop: 22464, Start Num: 21

Candidate Starts for RedBear_27:

(Start: 21 @21379 has 33 MA's), (28, 21457), (29, 21463), (41, 21637), (52, 21784), (60, 21880), (67, 21979), (68, 21988), (75, 22054), (89, 22201), (99, 22321), (101, 22357),

Gene: RenegadeRaider_25 Start: 18621, Stop: 19613, Start Num: 25

Candidate Starts for RenegadeRaider_25:

(Start: 25 @18621 has 11 MA's), (37, 18750), (39, 18783), (55, 18963), (61, 19065), (81, 19278), (86, 19329), (94, 19416), (98, 19479), (100, 19500), (103, 19587),

Gene: Romero_2 Start: 2650, Stop: 3414, Start Num: 26

Candidate Starts for Romero_2:

(Start: 26 @2650 has 18 MA's), (36, 2740), (48, 2953), (50, 2974), (58, 3046), (64, 3115), (66, 3142), (76, 3244), (79, 3271), (83, 3313),

Gene: SarahRose_25 Start: 21090, Stop: 22178, Start Num: 21

Candidate Starts for SarahRose_25:

(Start: 21 @21090 has 33 MA's), (28, 21168), (29, 21174), (39, 21330), (42, 21369), (52, 21495), (60, 21591), (67, 21690), (68, 21699), (75, 21771), (89, 21915), (92, 21951), (101, 22071),

Gene: Sinatra_24 Start: 18619, Stop: 19614, Start Num: 25

Candidate Starts for Sinatra_24:

(Start: 25 @18619 has 11 MA's), (37, 18748), (39, 18781), (42, 18820), (55, 18961), (61, 19063), (81, 19276), (86, 19330), (94, 19417), (98, 19480), (100, 19501), (103, 19588),

Gene: SirVictor_24 Start: 18692, Stop: 19684, Start Num: 26

Candidate Starts for SirVictor_24:

(23, 18674), (Start: 26 @18692 has 18 MA's), (Start: 30 @18722 has 1 MA's), (37, 18818), (39, 18851), (43, 18899), (45, 18956), (55, 19031), (59, 19091), (61, 19133), (81, 19346), (86, 19400), (94, 19487), (95, 19499), (98, 19550), (100, 19571), (103, 19658),

Gene: Snorlax_25 Start: 21093, Stop: 22181, Start Num: 21

Candidate Starts for Snorlax_25:

(Start: 21 @21093 has 33 MA's), (28, 21171), (29, 21177), (39, 21333), (52, 21498), (60, 21594), (67, 21693), (68, 21702), (75, 21774), (89, 21918), (92, 21954), (101, 22074),

Gene: SoJo_22 Start: 18310, Stop: 19248, Start Num: 26

Candidate Starts for SoJo_22:

(Start: 26 @18310 has 18 MA's), (27, 18319), (36, 18403), (49, 18625), (56, 18667), (58, 18709), (72, 18880), (90, 19081),

Gene: South40_26 Start: 21379, Stop: 22464, Start Num: 21

Candidate Starts for South40_26:

(Start: 21 @21379 has 33 MA's), (28, 21457), (29, 21463), (41, 21637), (52, 21784), (60, 21880), (67, 21979), (68, 21988), (75, 22054), (89, 22201), (99, 22321), (101, 22357),

Gene: Sujidade_27 Start: 21949, Stop: 23037, Start Num: 21

Candidate Starts for Sujidade_27:

(Start: 21 @21949 has 33 MA's), (28, 22027), (29, 22033), (39, 22189), (52, 22354), (60, 22450), (67, 22549), (75, 22630), (89, 22774), (92, 22810), (99, 22894), (101, 22930),

Gene: Superstar_29 Start: 22840, Stop: 23736, Start Num: 34

Candidate Starts for Superstar_29:

(31, 22789), (34, 22840), (38, 22912), (39, 22927), (44, 23017), (47, 23059), (51, 23092), (63, 23224), (71, 23296), (90, 23485),

Gene: TagePhighter_26 Start: 21093, Stop: 22181, Start Num: 21

Candidate Starts for TagePhighter_26:

(Start: 21 @21093 has 33 MA's), (28, 21171), (29, 21177), (39, 21333), (52, 21498), (60, 21594), (67, 21693), (68, 21702), (75, 21774), (89, 21918), (92, 21954), (101, 22074),

Gene: Tefunt_26 Start: 21591, Stop: 22544, Start Num: 30

Candidate Starts for Tefunt_26:

(22, 21522), (Start: 30 @21591 has 1 MA's), (32, 21603), (40, 21732), (46, 21843), (54, 21903), (57, 21951), (65, 22041), (77, 22164), (78, 22173), (82, 22218), (89, 22281), (90, 22293),

Gene: Theresita_24 Start: 18223, Stop: 19221, Start Num: 25

Candidate Starts for Theresita_24:

(Start: 25 @18223 has 11 MA's), (35, 18310), (37, 18352), (39, 18385), (55, 18565), (59, 18625), (61, 18667), (62, 18670), (64, 18691), (70, 18769), (81, 18889), (88, 18949), (95, 19036), (100, 19108), (103, 19195),

Gene: Toma_26 Start: 21661, Stop: 22749, Start Num: 21

Candidate Starts for Toma_26:

(Start: 21 @21661 has 33 MA's), (28, 21739), (29, 21745), (39, 21901), (52, 22066), (60, 22162), (67, 22261), (68, 22270), (75, 22342), (89, 22486), (92, 22522), (99, 22606), (101, 22642),

Gene: ToriToki_2 Start: 2650, Stop: 3414, Start Num: 26

Candidate Starts for ToriToki_2:

(Start: 26 @2650 has 18 MA's), (36, 2740), (48, 2953), (50, 2974), (58, 3046), (64, 3115), (66, 3142), (76, 3244), (79, 3271), (83, 3313),

Gene: Treat_2 Start: 2650, Stop: 3414, Start Num: 26

Candidate Starts for Treat_2:

(Start: 26 @2650 has 18 MA's), (36, 2740), (48, 2953), (50, 2974), (58, 3046), (64, 3115), (66, 3142), (76, 3244), (79, 3271), (83, 3313),

Gene: Triste_25 Start: 21081, Stop: 22169, Start Num: 21

Candidate Starts for Triste_25:

(Start: 21 @21081 has 33 MA's), (28, 21159), (29, 21165), (39, 21321), (52, 21486), (60, 21582), (67, 21681), (68, 21690), (75, 21762), (89, 21906), (92, 21942), (101, 22062),

Gene: TuanPN_25 Start: 21116, Stop: 22204, Start Num: 21

Candidate Starts for TuanPN_25:

(Start: 21 @21116 has 33 MA's), (28, 21194), (29, 21200), (39, 21356), (42, 21395), (52, 21521), (60, 21617), (67, 21716), (68, 21725), (75, 21794), (89, 21941), (92, 21977), (101, 22097),

Gene: Tubberson_22 Start: 18309, Stop: 19253, Start Num: 26

Candidate Starts for Tubberson_22:

(Start: 26 @18309 has 18 MA's), (27, 18318), (36, 18402), (49, 18624), (56, 18666), (58, 18708), (72, 18885), (90, 19086),

Gene: Werner_25 Start: 21091, Stop: 22179, Start Num: 21

Candidate Starts for Werner_25:

(Start: 21 @21091 has 33 MA's), (28, 21169), (29, 21175), (39, 21331), (52, 21496), (60, 21592), (67, 21691), (68, 21700), (75, 21772), (89, 21916), (92, 21952), (101, 22072),

Gene: Whatever_25 Start: 21091, Stop: 22179, Start Num: 21

Candidate Starts for Whatever_25:

(Start: 21 @21091 has 33 MA's), (28, 21169), (29, 21175), (39, 21331), (52, 21496), (60, 21592), (67, 21691), (68, 21700), (75, 21772), (89, 21916), (92, 21952), (101, 22072),

Gene: Yasdnii_25 Start: 21112, Stop: 22200, Start Num: 21

Candidate Starts for Yasdnii_25:

(Start: 21 @21112 has 33 MA's), (28, 21190), (29, 21196), (39, 21352), (42, 21391), (52, 21517), (60, 21613), (67, 21712), (68, 21721), (75, 21790), (89, 21937), (92, 21973), (101, 22093),

Gene: Zemlya_27 Start: 21653, Stop: 22741, Start Num: 21

Candidate Starts for Zemlya_27:

(18, 21590), (19, 21602), (Start: 21 @21653 has 33 MA's), (28, 21731), (29, 21737), (39, 21893), (42, 21932), (52, 22058), (60, 22154), (67, 22253), (68, 22262), (75, 22334), (89, 22478), (99, 22598), (101, 22634),

Gene: ZooBear_2 Start: 2660, Stop: 3421, Start Num: 26

Candidate Starts for ZooBear_2:

(Start: 26 @2660 has 18 MA's), (36, 2747), (48, 2960), (58, 3053), (64, 3122), (66, 3149), (76, 3251), (79, 3278), (83, 3320),