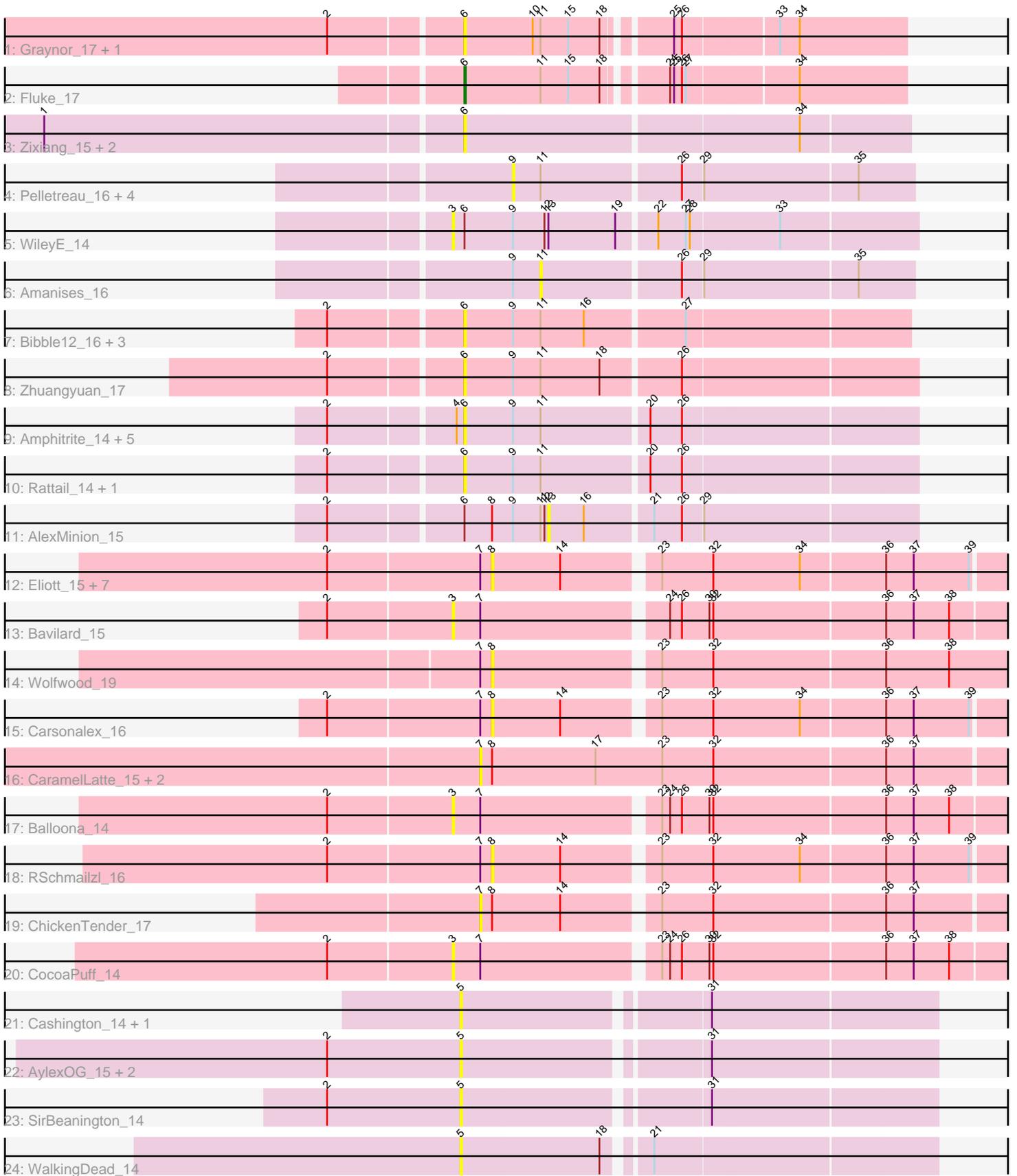# Pham 283887

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 283887 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283887 has 52 members, 51 are drafts.

Phages represented in each track:
• Track 1 : Graynor_17, MrBoss_17
• Track 2 : Fluke_17
• Track 3 : Zixiang_15, Niblet_15, Chicken_15
• Track 4 : Pelletreau_16, Westrich_16, Gravel_16, KendraB23_16, Shen_16
• Track 5 : WileyE_14
• Track 6 : Amanises_16
• Track 7 : Bibble12_16, Pineda_16, Bedetta_16, PhirstandPhine_16
• Track 8 : Zhuangyuan_17
• Track 9 : Amphitrite_14, Fingolfin_14, Camara_14, AdoptaAdorbs_14, Oppalora_14, Laphuphu24k_14
• Track 10 : Rattail_14, Azaz_14
• Track 11 : AlexMinion_15
• Track 12 : Eliott_15, GoldHunter_16, Socotra_16, PsychoKiller_15, Starburst_16, Sopespian_15, RADical_16, RedBaron_16
• Track 13 : Bavilard_15
• Track 14 : Wolfwood_19
• Track 15 : Carsonalex_16
• Track 16 : CaramelLatte_15, ChocoMunchkin_15, CanesSauce_15
• Track 17 : Balloona_14
• Track 18 : RSchmailzl_16
• Track 19 : ChickenTender_17
• Track 20 : CocoaPuff_14
• Track 21 : Cashington_14, Solea_15
• Track 22 : AylexOG_15, Jabb_14, Pecas_14
• Track 23 : SirBeanington_14
• Track 24 : WalkingDead_14

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

The start number called the most often in the published annotations is 6, it was called in 1 of the 1 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AdoptaAdorbs_14, Amphitrite_14, Azaz_14, Bedetta_16, Bibble12_16, Camara_14, Chicken_15, Fingolfin_14, Fluke_17, Graynor_17, Laphuphu24k_14, MrBoss_17, Niblet_15, Oppalora_14, PhirstandPhine_16, Pineda_16, Rattail_14, Zhuangyuan_17, Zixiang_15,

Genes that have the "Most Annotated" start but do not call it:
• AlexMinion_15, WileyE_14,

Genes that do not have the "Most Annotated" start:
• Amanises_16, AylexOG_15, Balloona_14, Bavilard_15, CanesSauce_15, CaramelLatte_15, Carsonalex_16, Cashington_14, ChickenTender_17, ChocoMunchkin_15, CocoaPuff_14, Eliott_15, GoldHunter_16, Gravel_16, Jabb_14, KendraB23_16, Pecas_14, Pelletreau_16, PsychoKiller_15, RADical_16, RSchmailzl_16, RedBaron_16, Shen_16, SirBeanington_14, Socotra_16, Solea_15, Sopespian_15, Starburst_16, WalkingDead_14, Westrich_16, Wolfwood_19,

Summary by start number:

Start 3:
• Found in 4 of 52 (7.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Balloona_14 (CT), Bavilard_15 (CT), CocoaPuff_14 (CT), WileyE_14 (AS1),

Start 5:
• Found in 7 of 52 (13.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AylexOG_15 (EB), Cashington_14 (EB), Jabb_14 (EB), Pecas_14 (EB), SirBeanington_14 (EB), Solea_15 (EB), WalkingDead_14 (EB),

Start 6:
• Found in 21 of 52 (40.4%) of genes in pham
• Manual Annotations of this start: 1 of 1
• Called 90.5% of time when present
• Phage (with cluster) where this start called: AdoptaAdorbs_14 (AS3), Amphitrite_14 (AS3), Azaz_14 (AS3), Bedetta_16 (AS2), Bibble12_16 (AS2), Camara_14 (AS3), Chicken_15 (AS1), Fingolfin_14 (AS3), Fluke_17 (AK), Graynor_17 (AK), Laphuphu24k_14 (AS3), MrBoss_17 (AK), Niblet_15 (AS1), Oppalora_14 (AS3), PhirstandPhine_16 (AS2), Pineda_16 (AS2), Rattail_14 (AS3), Zhuangyuan_17 (AS2), Zixiang_15 (AS1),

Start 7:
• Found in 18 of 52 (34.6%) of genes in pham
• No Manual Annotations of this start.
• Called 22.2% of time when present
• Phage (with cluster) where this start called: CanesSauce_15 (CT), CaramelLatte_15 (CT), ChickenTender_17 (CT), ChocoMunchkin_15 (CT),

Start 8:
• Found in 16 of 52 (30.8%) of genes in pham

• No Manual Annotations of this start.
• Called 68.8% of time when present
• Phage (with cluster) where this start called: Carsonalex_16 (CT), Eliott_15 (CT), GoldHunter_16 (CT), PsychoKiller_15 (CT), RADical_16 (CT), RSchmailzl_16 (CT), RedBaron_16 (CT), Socotra_16 (CT), Sopespian_15 (CT), Starburst_16 (CT), Wolfwood_19 (CT),

Start 9:
• Found in 21 of 52 (40.4%) of genes in pham
• No Manual Annotations of this start.
• Called 23.8% of time when present
• Phage (with cluster) where this start called: Gravel_16 (AS1), KendraB23_16 (AS1), Pelletreau_16 (AS1), Shen_16 (AS1), Westrich_16 (AS1),

Start 11:
• Found in 23 of 52 (44.2%) of genes in pham
• No Manual Annotations of this start.
• Called 4.3% of time when present
• Phage (with cluster) where this start called: Amanises_16 (AS1),

Start 13:
• Found in 2 of 52 (3.8%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: AlexMinion_15 (AS3),

Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, AS1, AK, EB, CT,

Info for manual annotations of cluster AK:
•Start number 6 was manually annotated 1 time for cluster AK.

Gene Information:

Gene: AdoptaAdorbs_14 Start: 9452, Stop: 9784, Start Num: 6
Candidate Starts for AdoptaAdorbs_14:
(2, 9356), (4, 9446), (Start: 6 @9452 has 1 MA's), (9, 9488), (11, 9509), (20, 9587), (26, 9611),

Gene: AlexMinion_15 Start: 9547, Stop: 9816, Start Num: 13
Candidate Starts for AlexMinion_15:
(2, 9388), (Start: 6 @9484 has 1 MA's), (8, 9505), (9, 9520), (11, 9541), (12, 9544), (13, 9547), (16, 9574), (21, 9622), (26, 9643), (29, 9658),

Gene: Amanises_16 Start: 10105, Stop: 10377, Start Num: 11
Candidate Starts for Amanises_16:

(9, 10084), (11, 10105), (26, 10207), (29, 10222), (35, 10336),

Gene: Amphitrite_14 Start: 9450, Stop: 9782, Start Num: 6
Candidate Starts for Amphitrite_14:
(2, 9354), (4, 9444), (Start: 6 @9450 has 1 MA's), (9, 9486), (11, 9507), (20, 9585), (26, 9609),

Gene: AylexOG_15 Start: 9938, Stop: 10279, Start Num: 5
Candidate Starts for AylexOG_15:
(2, 9836), (5, 9938), (31, 10112),

Gene: Azaz_14 Start: 9503, Stop: 9835, Start Num: 6
Candidate Starts for Azaz_14:
(2, 9407), (Start: 6 @9503 has 1 MA's), (9, 9539), (11, 9560), (20, 9638), (26, 9662),

Gene: Balloona_14 Start: 8969, Stop: 9385, Start Num: 3
Candidate Starts for Balloona_14:
(2, 8876), (3, 8969), (7, 8990), (23, 9116), (24, 9122), (26, 9131), (30, 9152), (32, 9155), (36, 9284),
(37, 9305), (38, 9332),

Gene: Bavilard_15 Start: 9749, Stop: 10165, Start Num: 3
Candidate Starts for Bavilard_15:
(2, 9656), (3, 9749), (7, 9770), (24, 9902), (26, 9911), (30, 9932), (32, 9935), (36, 10064), (37, 10085),
(38, 10112),

Gene: Bedetta_16 Start: 10036, Stop: 10362, Start Num: 6
Candidate Starts for Bedetta_16:
(2, 9940), (Start: 6 @10036 has 1 MA's), (9, 10072), (11, 10093), (16, 10126), (27, 10198),

Gene: Bibble12_16 Start: 10039, Stop: 10365, Start Num: 6
Candidate Starts for Bibble12_16:
(2, 9943), (Start: 6 @10039 has 1 MA's), (9, 10075), (11, 10096), (16, 10129), (27, 10201),

Gene: Camara_14 Start: 9453, Stop: 9785, Start Num: 6
Candidate Starts for Camara_14:
(2, 9357), (4, 9447), (Start: 6 @9453 has 1 MA's), (9, 9489), (11, 9510), (20, 9588), (26, 9612),

Gene: CanesSauce_15 Start: 9255, Stop: 9656, Start Num: 7
Candidate Starts for CanesSauce_15:
(7, 9255), (8, 9264), (17, 9342), (23, 9393), (32, 9432), (36, 9561), (37, 9582),

Gene: CaramelLatte_15 Start: 9255, Stop: 9656, Start Num: 7
Candidate Starts for CaramelLatte_15:
(7, 9255), (8, 9264), (17, 9342), (23, 9393), (32, 9432), (36, 9561), (37, 9582),

Gene: Carsonalex_16 Start: 9317, Stop: 9697, Start Num: 8
Candidate Starts for Carsonalex_16:
(2, 9194), (7, 9308), (8, 9317), (14, 9368), (23, 9434), (32, 9473), (34, 9539), (36, 9602), (37, 9623),
(39, 9665),

Gene: Cashington_14 Start: 9610, Stop: 9951, Start Num: 5
Candidate Starts for Cashington_14:
(5, 9610), (31, 9784),

Gene: ChickenTender_17 Start: 9300, Stop: 9689, Start Num: 7
Candidate Starts for ChickenTender_17:
(7, 9300), (8, 9309), (14, 9360), (23, 9426), (32, 9465), (36, 9594), (37, 9615),

Gene: Chicken_15 Start: 9843, Stop: 10169, Start Num: 6
Candidate Starts for Chicken_15:
(1, 9531), (Start: 6 @9843 has 1 MA's), (34, 10089),

Gene: ChocoMunchkin_15 Start: 9255, Stop: 9656, Start Num: 7
Candidate Starts for ChocoMunchkin_15:
(7, 9255), (8, 9264), (17, 9342), (23, 9393), (32, 9432), (36, 9561), (37, 9582),

Gene: CocoaPuff_14 Start: 8969, Stop: 9385, Start Num: 3
Candidate Starts for CocoaPuff_14:
(2, 8876), (3, 8969), (7, 8990), (23, 9116), (24, 9122), (26, 9131), (30, 9152), (32, 9155), (36, 9284), (37, 9305), (38, 9332),

Gene: Eliott_15 Start: 9259, Stop: 9639, Start Num: 8
Candidate Starts for Eliott_15:
(2, 9136), (7, 9250), (8, 9259), (14, 9310), (23, 9376), (32, 9415), (34, 9481), (36, 9544), (37, 9565), (39, 9607),

Gene: Fingolfin_14 Start: 9453, Stop: 9785, Start Num: 6
Candidate Starts for Fingolfin_14:
(2, 9357), (4, 9447), (Start: 6 @9453 has 1 MA's), (9, 9489), (11, 9510), (20, 9588), (26, 9612),

Gene: Fluke_17 Start: 12295, Stop: 12609, Start Num: 6
Candidate Starts for Fluke_17:
(Start: 6 @12295 has 1 MA's), (11, 12352), (15, 12373), (18, 12397), (24, 12436), (25, 12439), (26, 12445), (27, 12448), (34, 12529),

Gene: GoldHunter_16 Start: 9260, Stop: 9640, Start Num: 8
Candidate Starts for GoldHunter_16:
(2, 9137), (7, 9251), (8, 9260), (14, 9311), (23, 9377), (32, 9416), (34, 9482), (36, 9545), (37, 9566), (39, 9608),

Gene: Gravel_16 Start: 10083, Stop: 10376, Start Num: 9
Candidate Starts for Gravel_16:
(9, 10083), (11, 10104), (26, 10206), (29, 10221), (35, 10335),

Gene: Graynor_17 Start: 12313, Stop: 12627, Start Num: 6
Candidate Starts for Graynor_17:
(2, 12217), (Start: 6 @12313 has 1 MA's), (10, 12364), (11, 12370), (15, 12391), (18, 12415), (25, 12457), (26, 12463), (33, 12532), (34, 12547),

Gene: Jabb_14 Start: 9633, Stop: 9974, Start Num: 5
Candidate Starts for Jabb_14:
(2, 9531), (5, 9633), (31, 9807),

Gene: KendraB23_16 Start: 10084, Stop: 10377, Start Num: 9
Candidate Starts for KendraB23_16:
(9, 10084), (11, 10105), (26, 10207), (29, 10222), (35, 10336),

Gene: Laphuphu24k_14 Start: 9452, Stop: 9784, Start Num: 6
Candidate Starts for Laphuphu24k_14:
(2, 9356), (4, 9446), (Start: 6 @9452 has 1 MA's), (9, 9488), (11, 9509), (20, 9587), (26, 9611),

Gene: MrBoss_17 Start: 12277, Stop: 12591, Start Num: 6
Candidate Starts for MrBoss_17:
(2, 12181), (Start: 6 @12277 has 1 MA's), (10, 12328), (11, 12334), (15, 12355), (18, 12379), (25, 12421), (26, 12427), (33, 12496), (34, 12511),

Gene: Niblet_15 Start: 9843, Stop: 10169, Start Num: 6
Candidate Starts for Niblet_15:
(1, 9531), (Start: 6 @9843 has 1 MA's), (34, 10089),

Gene: Oppalora_14 Start: 9450, Stop: 9782, Start Num: 6
Candidate Starts for Oppalora_14:
(2, 9354), (4, 9444), (Start: 6 @9450 has 1 MA's), (9, 9486), (11, 9507), (20, 9585), (26, 9609),

Gene: Pecas_14 Start: 9594, Stop: 9935, Start Num: 5
Candidate Starts for Pecas_14:
(2, 9492), (5, 9594), (31, 9768),

Gene: Pelletreau_16 Start: 10083, Stop: 10376, Start Num: 9
Candidate Starts for Pelletreau_16:
(9, 10083), (11, 10104), (26, 10206), (29, 10221), (35, 10335),

Gene: PhirstandPhine_16 Start: 10036, Stop: 10362, Start Num: 6
Candidate Starts for PhirstandPhine_16:
(2, 9940), (Start: 6 @10036 has 1 MA's), (9, 10072), (11, 10093), (16, 10126), (27, 10198),

Gene: Pineda_16 Start: 10036, Stop: 10362, Start Num: 6
Candidate Starts for Pineda_16:
(2, 9940), (Start: 6 @10036 has 1 MA's), (9, 10072), (11, 10093), (16, 10126), (27, 10198),

Gene: PsychoKiller_15 Start: 9259, Stop: 9639, Start Num: 8
Candidate Starts for PsychoKiller_15:
(2, 9136), (7, 9250), (8, 9259), (14, 9310), (23, 9376), (32, 9415), (34, 9481), (36, 9544), (37, 9565), (39, 9607),

Gene: RADical_16 Start: 9260, Stop: 9640, Start Num: 8
Candidate Starts for RADical_16:
(2, 9137), (7, 9251), (8, 9260), (14, 9311), (23, 9377), (32, 9416), (34, 9482), (36, 9545), (37, 9566), (39, 9608),

Gene: RSchmailzl_16 Start: 9403, Stop: 9783, Start Num: 8
Candidate Starts for RSchmailzl_16:
(2, 9280), (7, 9394), (8, 9403), (14, 9454), (23, 9520), (32, 9559), (34, 9625), (36, 9688), (37, 9709), (39, 9751),

Gene: Rattail_14 Start: 9503, Stop: 9835, Start Num: 6
Candidate Starts for Rattail_14:
(2, 9407), (Start: 6 @9503 has 1 MA's), (9, 9539), (11, 9560), (20, 9638), (26, 9662),

Gene: RedBaron_16 Start: 9303, Stop: 9683, Start Num: 8

Candidate Starts for RedBaron_16:
(2, 9180), (7, 9294), (8, 9303), (14, 9354), (23, 9420), (32, 9459), (34, 9525), (36, 9588), (37, 9609), (39, 9651),

Gene: Shen_16 Start: 10084, Stop: 10377, Start Num: 9
Candidate Starts for Shen_16:
(9, 10084), (11, 10105), (26, 10207), (29, 10222), (35, 10336),

Gene: SirBeanington_14 Start: 9567, Stop: 9908, Start Num: 5
Candidate Starts for SirBeanington_14:
(2, 9465), (5, 9567), (31, 9741),

Gene: Socotra_16 Start: 9259, Stop: 9639, Start Num: 8
Candidate Starts for Socotra_16:
(2, 9136), (7, 9250), (8, 9259), (14, 9310), (23, 9376), (32, 9415), (34, 9481), (36, 9544), (37, 9565), (39, 9607),

Gene: Solea_15 Start: 9979, Stop: 10320, Start Num: 5
Candidate Starts for Solea_15:
(5, 9979), (31, 10153),

Gene: Sopespian_15 Start: 9260, Stop: 9640, Start Num: 8
Candidate Starts for Sopespian_15:
(2, 9137), (7, 9251), (8, 9260), (14, 9311), (23, 9377), (32, 9416), (34, 9482), (36, 9545), (37, 9566), (39, 9608),

Gene: Starburst_16 Start: 9259, Stop: 9639, Start Num: 8
Candidate Starts for Starburst_16:
(2, 9136), (7, 9250), (8, 9259), (14, 9310), (23, 9376), (32, 9415), (34, 9481), (36, 9544), (37, 9565), (39, 9607),

Gene: WalkingDead_14 Start: 9801, Stop: 10142, Start Num: 5
Candidate Starts for WalkingDead_14:
(5, 9801), (18, 9906), (21, 9933),

Gene: Westrich_16 Start: 10072, Stop: 10365, Start Num: 9
Candidate Starts for Westrich_16:
(9, 10072), (11, 10093), (26, 10195), (29, 10210), (35, 10324),

Gene: WileyE_14 Start: 9804, Stop: 10145, Start Num: 3
Candidate Starts for WileyE_14:
(3, 9804), (Start: 6 @9813 has 1 MA's), (9, 9849), (12, 9873), (13, 9876), (19, 9927), (22, 9954), (27, 9975), (28, 9978), (33, 10044),

Gene: Wolfwood_19 Start: 10242, Stop: 10628, Start Num: 8
Candidate Starts for Wolfwood_19:
(7, 10233), (8, 10242), (23, 10359), (32, 10398), (36, 10527), (38, 10575),

Gene: Zhuangyuan_17 Start: 10214, Stop: 10546, Start Num: 6
Candidate Starts for Zhuangyuan_17:
(2, 10118), (Start: 6 @10214 has 1 MA's), (9, 10250), (11, 10271), (18, 10316), (26, 10373),

Gene: Zixiang_15 Start: 9843, Stop: 10169, Start Num: 6

Candidate Starts for Zixiang_15:
(1, 9531), (Start: 6 @9843 has 1 MA's), (34, 10089),