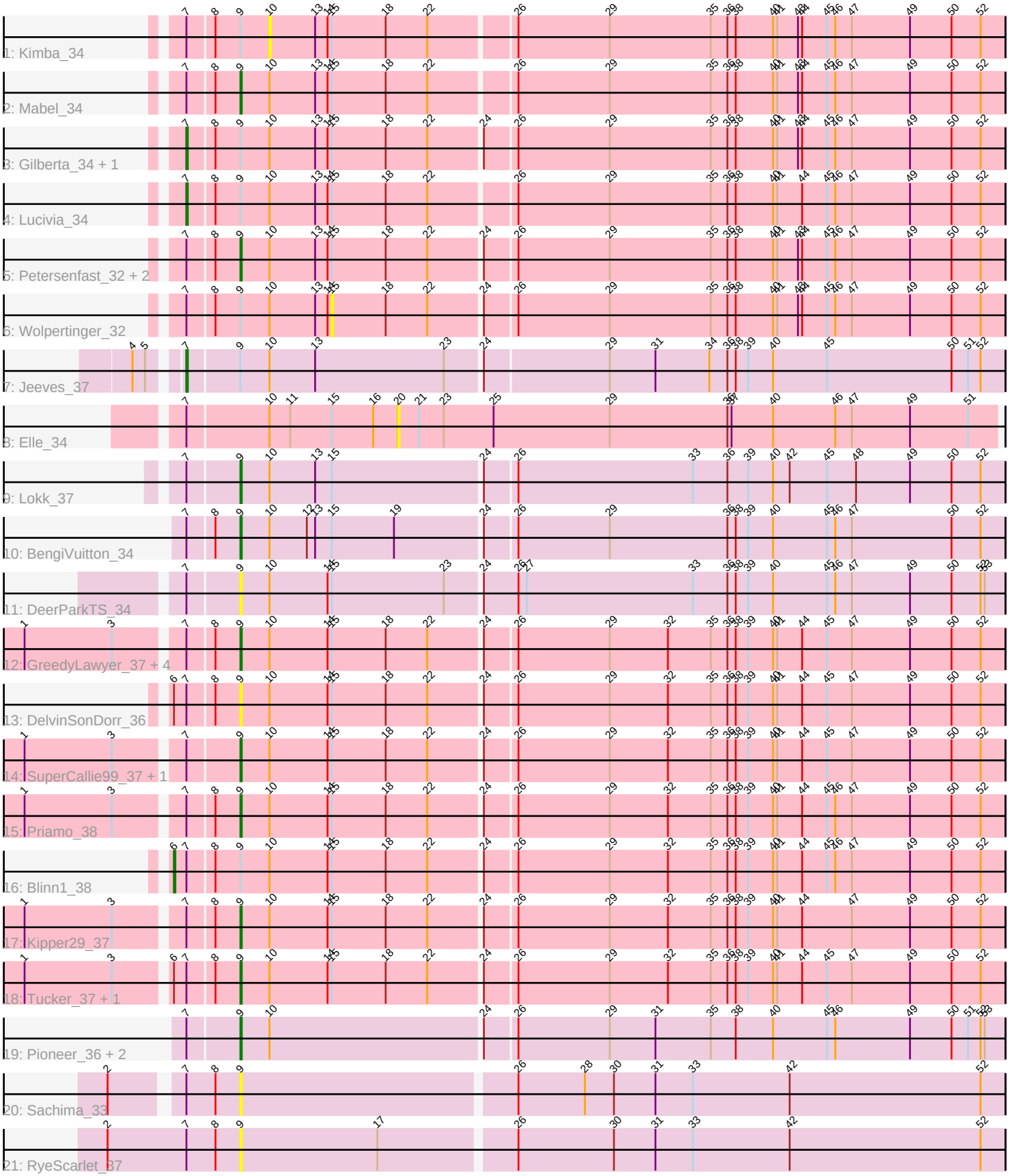
Pham 303563


1: Kimba_34
2: Mabel_34
3: Gilberta_34 + 1
4: Lucivia_34
5: Petersenfast_32 + 2
6: Wolpertinger_32
7: Jeeves_37
8: Elle_34
9: Lokk_37
10: BengiVuitton_34
11: DeerParkTS_34
12: GreedyLawyer_37 + 4
13: DelvinSonDorr_36
14: SuperCallie99_37 + 1
15: Priamo_38
16: Blinn1_38
17: Kipper29_37
18: Tucker_37 + 1
19: Pioneer_36 + 2
20: Sachima_33
21: RyeScarlet_37

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 303563 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303563 has 32 members, 12 are drafts.

Phages represented in each track:
- Track 1 : Kimba_34
- Track 2 : Mabel_34
- Track 3 : Gilberta_34, MaCh_34
- Track 4 : Lucivia_34
- Track 5 : Petersenfast_32, Saskia_33, Bachome_35
- Track 6 : Wolpertinger_32
- Track 7 : Jeeves_37
- Track 8 : Elle_34
- Track 9 : Lokk_37
- Track 10 : BengiVuitton_34
- Track 11 : DeerParkTS_34
- Track 12 : GreedyLawyer_37, Garak_38, BlessJoy_37, ToneTone_34, Candra_37
- Track 13 : DelvinSonDorr_36
- Track 14 : SuperCallie99_37, Gruunaga_37
- Track 15 : Priamo_38
- Track 16 : Blinn1_38
- Track 17 : Kipper29_37
- Track 18 : Tucker_37, Wiks_36
- Track 19 : Pioneer_36, Ayanochan_36, ExplosioNervosa_36
- Track 20 : Sachima_33
- Track 21 : RyeScarlet_37

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

The start number called the most often in the published annotations is 9, it was called in 15 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Ayanochan_36, Bachome_35, BengiVuitton_34, BlessJoy_37, Candra_37, DeerParkTS_34, DelvinSonDorr_36, ExplosioNervosa_36, Garak_38, GreedyLawyer_37, Gruunaga_37, Kipper29_37, Lokk_37, Mabel_34, Petersenfast_32, Pioneer_36, Priamo_38, RyeScarlet_37, Sachima_33, Saskia_33, SuperCallie99_37, ToneTone_34, Tucker_37, Wiks_36,

Genes that have the "Most Annotated" start but do not call it:
• Blinn1_38, Gilberta_34, Jeeves_37, Kimba_34, Lucivia_34, MaCh_34, Wolpertinger_32,

Genes that do not have the "Most Annotated" start:
• Elle_34,

Summary by start number:

Start 6:
• Found in 4 of 32 (12.5%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Blinn1_38 (A6),

Start 7:
• Found in 32 of 32 (100.0%) of genes in pham
• Manual Annotations of this start: 4 of 20
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Gilberta_34 (A11), Jeeves_37 (A14), Lucivia_34 (A11), MaCh_34 (A11),

Start 9:
• Found in 31 of 32 (96.9%) of genes in pham
• Manual Annotations of this start: 15 of 20
• Called 77.4% of time when present
• Phage (with cluster) where this start called: Ayanochan_36 (A9), Bachome_35 (A11), BengiVuitton_34 (A2), BlessJoy_37 (A6), Candra_37 (A6), DeerParkTS_34 (A2), DelvinSonDorr_36 (A6), ExplosioNervosa_36 (A9), Garak_38 (A6), GreedyLawyer_37 (A6), Gruunaga_37 (A6), Kipper29_37 (A6), Lokk_37 (A2), Mabel_34 (A11), Petersenfast_32 (A11), Pioneer_36 (A9), Priamo_38 (A6), RyeScarlet_37 (A9), Sachima_33 (A9), Saskia_33 (A11), SuperCallie99_37 (A6), ToneTone_34 (A6), Tucker_37 (A6), Wiks_36 (A6),

Start 10:
• Found in 30 of 32 (93.8%) of genes in pham
• No Manual Annotations of this start.
• Called 3.3% of time when present
• Phage (with cluster) where this start called: Kimba_34 (A11),

Start 15:
• Found in 26 of 32 (81.2%) of genes in pham
• No Manual Annotations of this start.
• Called 3.8% of time when present
• Phage (with cluster) where this start called: Wolpertinger_32 (A11),

Start 20:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elle_34 (A15),

Summary by clusters:

There are 6 clusters represented in this pham: A15, A14, A11, A2, A6, A9,

Info for manual annotations of cluster A11:
•Start number 7 was manually annotated 3 times for cluster A11.
•Start number 9 was manually annotated 2 times for cluster A11.

Info for manual annotations of cluster A14:
•Start number 7 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:
•Start number 9 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A6:
•Start number 6 was manually annotated 1 time for cluster A6.
•Start number 9 was manually annotated 9 times for cluster A6.

Info for manual annotations of cluster A9:
•Start number 9 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: Ayanochan_36 Start: 27076, Stop: 27618, Start Num: 9
Candidate Starts for Ayanochan_36:
(Start: 7 @27040 has 4 MA's), (Start: 9 @27076 has 15 MA's), (10, 27097), (24, 27247), (26, 27268), (29, 27334), (31, 27367), (35, 27406), (38, 27424), (40, 27451), (45, 27490), (46, 27496), (49, 27550), (50, 27580), (51, 27592), (52, 27601), (53, 27604),

Gene: Bachome_35 Start: 26144, Stop: 26686, Start Num: 9
Candidate Starts for Bachome_35:
(Start: 7 @26108 has 4 MA's), (8, 26126), (Start: 9 @26144 has 15 MA's), (10, 26165), (13, 26198), (14, 26207), (15, 26210), (18, 26249), (22, 26279), (24, 26315), (26, 26336), (29, 26402), (35, 26474), (36, 26486), (38, 26492), (40, 26519), (41, 26522), (43, 26537), (44, 26540), (45, 26558), (46, 26564), (47, 26576), (49, 26618), (50, 26648), (52, 26669),

Gene: BengiVuitton_34 Start: 26453, Stop: 26995, Start Num: 9
Candidate Starts for BengiVuitton_34:
(Start: 7 @26417 has 4 MA's), (8, 26435), (Start: 9 @26453 has 15 MA's), (10, 26474), (12, 26501), (13, 26507), (15, 26519), (19, 26564), (24, 26624), (26, 26645), (29, 26711), (36, 26795), (38, 26801), (39, 26810), (40, 26828), (45, 26867), (46, 26873), (47, 26885), (50, 26957), (52, 26978),

Gene: BlessJoy_37 Start: 25105, Stop: 25647, Start Num: 9
Candidate Starts for BlessJoy_37:
(1, 24961), (3, 25024), (Start: 7 @25069 has 4 MA's), (8, 25087), (Start: 9 @25105 has 15 MA's), (10, 25126), (14, 25168), (15, 25171), (18, 25210), (22, 25240), (24, 25276), (26, 25297), (29, 25363), (32, 25405), (35, 25435), (36, 25447), (38, 25453), (39, 25462), (40, 25480), (41, 25483), (44, 25501), (45, 25519), (47, 25537), (49, 25579), (50, 25609), (52, 25630),

Gene: Blinn1_38 Start: 25132, Stop: 25719, Start Num: 6
Candidate Starts for Blinn1_38:

(Start: 6 @25132 has 1 MA's), (Start: 7 @25141 has 4 MA's), (8, 25159), (Start: 9 @25177 has 15 MA's), (10, 25198), (14, 25240), (15, 25243), (18, 25282), (22, 25312), (24, 25348), (26, 25369), (29, 25435), (32, 25477), (35, 25507), (36, 25519), (38, 25525), (39, 25534), (40, 25552), (41, 25555), (44, 25573), (45, 25591), (46, 25597), (47, 25609), (49, 25651), (50, 25681), (52, 25702),

Gene: Candra_37 Start: 25146, Stop: 25688, Start Num: 9
Candidate Starts for Candra_37:
(1, 25002), (3, 25065), (Start: 7 @25110 has 4 MA's), (8, 25128), (Start: 9 @25146 has 15 MA's), (10, 25167), (14, 25209), (15, 25212), (18, 25251), (22, 25281), (24, 25317), (26, 25338), (29, 25404), (32, 25446), (35, 25476), (36, 25488), (38, 25494), (39, 25503), (40, 25521), (41, 25524), (44, 25542), (45, 25560), (47, 25578), (49, 25620), (50, 25650), (52, 25671),

Gene: DeerParkTS_34 Start: 26427, Stop: 26972, Start Num: 9
Candidate Starts for DeerParkTS_34:
(Start: 7 @26391 has 4 MA's), (Start: 9 @26427 has 15 MA's), (10, 26448), (14, 26490), (15, 26493), (23, 26574), (24, 26598), (26, 26622), (27, 26628), (33, 26748), (36, 26772), (38, 26778), (39, 26787), (40, 26805), (45, 26844), (46, 26850), (47, 26862), (49, 26904), (50, 26934), (52, 26955), (53, 26958),

Gene: DelvinSonDorr_36 Start: 25104, Stop: 25646, Start Num: 9
Candidate Starts for DelvinSonDorr_36:
(Start: 6 @25059 has 1 MA's), (Start: 7 @25068 has 4 MA's), (8, 25086), (Start: 9 @25104 has 15 MA's), (10, 25125), (14, 25167), (15, 25170), (18, 25209), (22, 25239), (24, 25275), (26, 25296), (29, 25362), (32, 25404), (35, 25434), (36, 25446), (38, 25452), (39, 25461), (40, 25479), (41, 25482), (44, 25500), (45, 25518), (47, 25536), (49, 25578), (50, 25608), (52, 25629),

Gene: Elle_34 Start: 24107, Stop: 24538, Start Num: 20
Candidate Starts for Elle_34:
(Start: 7 @23957 has 4 MA's), (10, 24014), (11, 24029), (15, 24059), (16, 24089), (20, 24107), (21, 24122), (23, 24140), (25, 24176), (29, 24260), (36, 24344), (37, 24347), (40, 24377), (46, 24422), (47, 24434), (49, 24476), (51, 24518),

Gene: ExplosioNervosa_36 Start: 27111, Stop: 27653, Start Num: 9
Candidate Starts for ExplosioNervosa_36:
(Start: 7 @27075 has 4 MA's), (Start: 9 @27111 has 15 MA's), (10, 27132), (24, 27282), (26, 27303), (29, 27369), (31, 27402), (35, 27441), (38, 27459), (40, 27486), (45, 27525), (46, 27531), (49, 27585), (50, 27615), (51, 27627), (52, 27636), (53, 27639),

Gene: Garak_38 Start: 25111, Stop: 25653, Start Num: 9
Candidate Starts for Garak_38:
(1, 24967), (3, 25030), (Start: 7 @25075 has 4 MA's), (8, 25093), (Start: 9 @25111 has 15 MA's), (10, 25132), (14, 25174), (15, 25177), (18, 25216), (22, 25246), (24, 25282), (26, 25303), (29, 25369), (32, 25411), (35, 25441), (36, 25453), (38, 25459), (39, 25468), (40, 25486), (41, 25489), (44, 25507), (45, 25525), (47, 25543), (49, 25585), (50, 25615), (52, 25636),

Gene: Gilberta_34 Start: 26111, Stop: 26689, Start Num: 7
Candidate Starts for Gilberta_34:
(Start: 7 @26111 has 4 MA's), (8, 26129), (Start: 9 @26147 has 15 MA's), (10, 26168), (13, 26201), (14, 26210), (15, 26213), (18, 26252), (22, 26282), (24, 26318), (26, 26339), (29, 26405), (35, 26477), (36, 26489), (38, 26495), (40, 26522), (41, 26525), (43, 26540), (44, 26543), (45, 26561), (46, 26567), (47, 26579), (49, 26621), (50, 26651), (52, 26672),

Gene: GreedyLawyer_37 Start: 25110, Stop: 25652, Start Num: 9
Candidate Starts for GreedyLawyer_37:

(1, 24966), (3, 25029), (Start: 7 @25074 has 4 MA's), (8, 25092), (Start: 9 @25110 has 15 MA's), (10, 25131), (14, 25173), (15, 25176), (18, 25215), (22, 25245), (24, 25281), (26, 25302), (29, 25368), (32, 25410), (35, 25440), (36, 25452), (38, 25458), (39, 25467), (40, 25485), (41, 25488), (44, 25506), (45, 25524), (47, 25542), (49, 25584), (50, 25614), (52, 25635),

Gene: Gruunaga_37 Start: 25099, Stop: 25641, Start Num: 9
Candidate Starts for Gruunaga_37:
(1, 24955), (3, 25018), (Start: 7 @25063 has 4 MA's), (Start: 9 @25099 has 15 MA's), (10, 25120), (14, 25162), (15, 25165), (18, 25204), (22, 25234), (24, 25270), (26, 25291), (29, 25357), (32, 25399), (35, 25429), (36, 25441), (38, 25447), (39, 25456), (40, 25474), (41, 25477), (44, 25495), (45, 25513), (47, 25531), (49, 25573), (50, 25603), (52, 25624),

Gene: Jeeves_37 Start: 26658, Stop: 27236, Start Num: 7
Candidate Starts for Jeeves_37:
(4, 26631), (5, 26640), (Start: 7 @26658 has 4 MA's), (Start: 9 @26694 has 15 MA's), (10, 26715), (13, 26748), (23, 26841), (24, 26865), (29, 26952), (31, 26985), (34, 27024), (36, 27036), (38, 27042), (39, 27051), (40, 27069), (45, 27108), (50, 27198), (51, 27210), (52, 27219),

Gene: Kimba_34 Start: 26141, Stop: 26662, Start Num: 10
Candidate Starts for Kimba_34:
(Start: 7 @26084 has 4 MA's), (8, 26102), (Start: 9 @26120 has 15 MA's), (10, 26141), (13, 26174), (14, 26183), (15, 26186), (18, 26225), (22, 26255), (26, 26312), (29, 26378), (35, 26450), (36, 26462), (38, 26468), (40, 26495), (41, 26498), (43, 26513), (44, 26516), (45, 26534), (46, 26540), (47, 26552), (49, 26594), (50, 26624), (52, 26645),

Gene: Kipper29_37 Start: 25110, Stop: 25652, Start Num: 9
Candidate Starts for Kipper29_37:
(1, 24966), (3, 25029), (Start: 7 @25074 has 4 MA's), (8, 25092), (Start: 9 @25110 has 15 MA's), (10, 25131), (14, 25173), (15, 25176), (18, 25215), (22, 25245), (24, 25281), (26, 25302), (29, 25368), (32, 25410), (35, 25440), (36, 25452), (38, 25458), (39, 25467), (40, 25485), (41, 25488), (44, 25506), (47, 25542), (49, 25584), (50, 25614), (52, 25635),

Gene: Lokk_37 Start: 27588, Stop: 28130, Start Num: 9
Candidate Starts for Lokk_37:
(Start: 7 @27552 has 4 MA's), (Start: 9 @27588 has 15 MA's), (10, 27609), (13, 27642), (15, 27654), (24, 27759), (26, 27780), (33, 27906), (36, 27930), (39, 27945), (40, 27963), (42, 27975), (45, 28002), (48, 28023), (49, 28062), (50, 28092), (52, 28113),

Gene: Lucivia_34 Start: 26169, Stop: 26747, Start Num: 7
Candidate Starts for Lucivia_34:
(Start: 7 @26169 has 4 MA's), (8, 26187), (Start: 9 @26205 has 15 MA's), (10, 26226), (13, 26259), (14, 26268), (15, 26271), (18, 26310), (22, 26340), (26, 26397), (29, 26463), (35, 26535), (36, 26547), (38, 26553), (40, 26580), (41, 26583), (44, 26601), (45, 26619), (46, 26625), (47, 26637), (49, 26679), (50, 26709), (52, 26730),

Gene: MaCh_34 Start: 26108, Stop: 26686, Start Num: 7
Candidate Starts for MaCh_34:
(Start: 7 @26108 has 4 MA's), (8, 26126), (Start: 9 @26144 has 15 MA's), (10, 26165), (13, 26198), (14, 26207), (15, 26210), (18, 26249), (22, 26279), (24, 26315), (26, 26336), (29, 26402), (35, 26474), (36, 26486), (38, 26492), (40, 26519), (41, 26522), (43, 26537), (44, 26540), (45, 26558), (46, 26564), (47, 26576), (49, 26618), (50, 26648), (52, 26669),

Gene: Mabel_34 Start: 26118, Stop: 26660, Start Num: 9

Candidate Starts for Mabel_34:
(Start: 7 @26082 has 4 MA's), (8, 26100), (Start: 9 @26118 has 15 MA's), (10, 26139), (13, 26172), (14, 26181), (15, 26184), (18, 26223), (22, 26253), (26, 26310), (29, 26376), (35, 26448), (36, 26460), (38, 26466), (40, 26493), (41, 26496), (43, 26511), (44, 26514), (45, 26532), (46, 26538), (47, 26550), (49, 26592), (50, 26622), (52, 26643),

Gene: Petersenfast_32 Start: 25704, Stop: 26246, Start Num: 9
Candidate Starts for Petersenfast_32:
(Start: 7 @25668 has 4 MA's), (8, 25686), (Start: 9 @25704 has 15 MA's), (10, 25725), (13, 25758), (14, 25767), (15, 25770), (18, 25809), (22, 25839), (24, 25875), (26, 25896), (29, 25962), (35, 26034), (36, 26046), (38, 26052), (40, 26079), (41, 26082), (43, 26097), (44, 26100), (45, 26118), (46, 26124), (47, 26136), (49, 26178), (50, 26208), (52, 26229),

Gene: Pioneer_36 Start: 27076, Stop: 27618, Start Num: 9
Candidate Starts for Pioneer_36:
(Start: 7 @27040 has 4 MA's), (Start: 9 @27076 has 15 MA's), (10, 27097), (24, 27247), (26, 27268), (29, 27334), (31, 27367), (35, 27406), (38, 27424), (40, 27451), (45, 27490), (46, 27496), (49, 27550), (50, 27580), (51, 27592), (52, 27601), (53, 27604),

Gene: Priamo_38 Start: 25149, Stop: 25691, Start Num: 9
Candidate Starts for Priamo_38:
(1, 25005), (3, 25068), (Start: 7 @25113 has 4 MA's), (8, 25131), (Start: 9 @25149 has 15 MA's), (10, 25170), (14, 25212), (15, 25215), (18, 25254), (22, 25284), (24, 25320), (26, 25341), (29, 25407), (32, 25449), (35, 25479), (36, 25491), (38, 25497), (39, 25506), (40, 25524), (41, 25527), (44, 25545), (45, 25563), (46, 25569), (47, 25581), (49, 25623), (50, 25653), (52, 25674),

Gene: RyeScarlet_37 Start: 27076, Stop: 27618, Start Num: 9
Candidate Starts for RyeScarlet_37:
(2, 26980), (Start: 7 @27037 has 4 MA's), (8, 27058), (Start: 9 @27076 has 15 MA's), (17, 27175), (26, 27268), (30, 27337), (31, 27367), (33, 27394), (42, 27463), (52, 27601),

Gene: Sachima_33 Start: 27052, Stop: 27594, Start Num: 9
Candidate Starts for Sachima_33:
(2, 26968), (Start: 7 @27013 has 4 MA's), (8, 27034), (Start: 9 @27052 has 15 MA's), (26, 27244), (28, 27292), (30, 27313), (31, 27343), (33, 27370), (42, 27439), (52, 27577),

Gene: Saskia_33 Start: 25901, Stop: 26443, Start Num: 9
Candidate Starts for Saskia_33:
(Start: 7 @25865 has 4 MA's), (8, 25883), (Start: 9 @25901 has 15 MA's), (10, 25922), (13, 25955), (14, 25964), (15, 25967), (18, 26006), (22, 26036), (24, 26072), (26, 26093), (29, 26159), (35, 26231), (36, 26243), (38, 26249), (40, 26276), (41, 26279), (43, 26294), (44, 26297), (45, 26315), (46, 26321), (47, 26333), (49, 26375), (50, 26405), (52, 26426),

Gene: SuperCallie99_37 Start: 25102, Stop: 25644, Start Num: 9
Candidate Starts for SuperCallie99_37:
(1, 24958), (3, 25021), (Start: 7 @25066 has 4 MA's), (Start: 9 @25102 has 15 MA's), (10, 25123), (14, 25165), (15, 25168), (18, 25207), (22, 25237), (24, 25273), (26, 25294), (29, 25360), (32, 25402), (35, 25432), (36, 25444), (38, 25450), (39, 25459), (40, 25477), (41, 25480), (44, 25498), (45, 25516), (47, 25534), (49, 25576), (50, 25606), (52, 25627),

Gene: ToneTone_34 Start: 24815, Stop: 25357, Start Num: 9
Candidate Starts for ToneTone_34:

(1, 24671), (3, 24734), (Start: 7 @24779 has 4 MA's), (8, 24797), (Start: 9 @24815 has 15 MA's), (10, 24836), (14, 24878), (15, 24881), (18, 24920), (22, 24950), (24, 24986), (26, 25007), (29, 25073), (32, 25115), (35, 25145), (36, 25157), (38, 25163), (39, 25172), (40, 25190), (41, 25193), (44, 25211), (45, 25229), (47, 25247), (49, 25289), (50, 25319), (52, 25340),

Gene: Tucker_37 Start: 24901, Stop: 25443, Start Num: 9
Candidate Starts for Tucker_37:
(1, 24757), (3, 24820), (Start: 6 @24856 has 1 MA's), (Start: 7 @24865 has 4 MA's), (8, 24883), (Start: 9 @24901 has 15 MA's), (10, 24922), (14, 24964), (15, 24967), (18, 25006), (22, 25036), (24, 25072), (26, 25093), (29, 25159), (32, 25201), (35, 25231), (36, 25243), (38, 25249), (39, 25258), (40, 25276), (41, 25279), (44, 25297), (45, 25315), (47, 25333), (49, 25375), (50, 25405), (52, 25426),

Gene: Wiks_36 Start: 24883, Stop: 25425, Start Num: 9
Candidate Starts for Wiks_36:
(1, 24739), (3, 24802), (Start: 6 @24838 has 1 MA's), (Start: 7 @24847 has 4 MA's), (8, 24865), (Start: 9 @24883 has 15 MA's), (10, 24904), (14, 24946), (15, 24949), (18, 24988), (22, 25018), (24, 25054), (26, 25075), (29, 25141), (32, 25183), (35, 25213), (36, 25225), (38, 25231), (39, 25240), (40, 25258), (41, 25261), (44, 25279), (45, 25297), (47, 25315), (49, 25357), (50, 25387), (52, 25408),

Gene: Wolpertinger_32 Start: 25770, Stop: 26246, Start Num: 15
Candidate Starts for Wolpertinger_32:
(Start: 7 @25668 has 4 MA's), (8, 25686), (Start: 9 @25704 has 15 MA's), (10, 25725), (13, 25758), (14, 25767), (15, 25770), (18, 25809), (22, 25839), (24, 25875), (26, 25896), (29, 25962), (35, 26034), (36, 26046), (38, 26052), (40, 26079), (41, 26082), (43, 26097), (44, 26100), (45, 26118), (46, 26124), (47, 26136), (49, 26178), (50, 26208), (52, 26229),