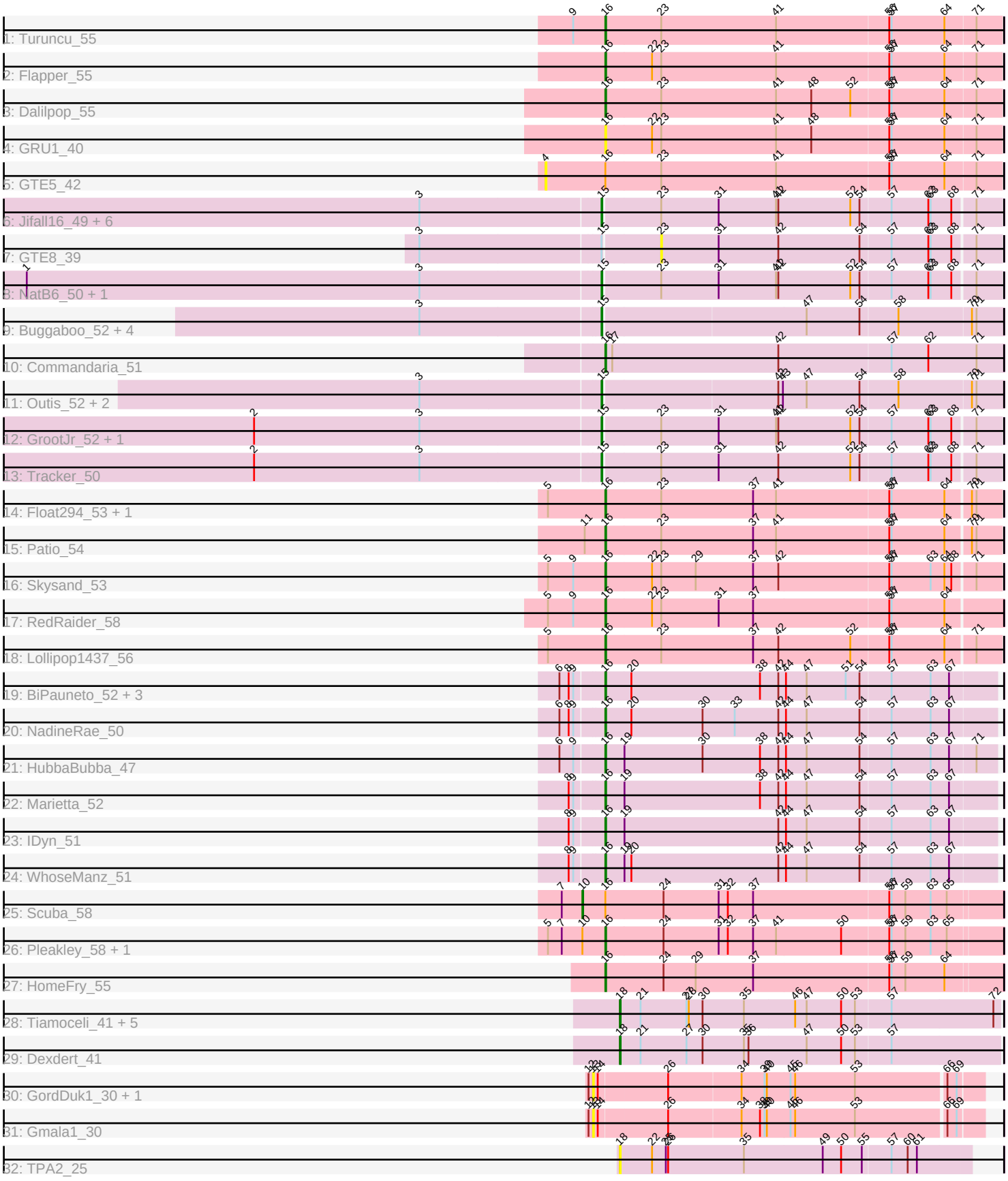
Pham 347666


1: Turuncu_55
2: Flapper_55
3: Dalilpop_55
4: GRU1_40
5: GTE5_42
6: Jifall16_49 + 6
7: GTE8_39
8: NatB6_50 + 1
9: Buggaboo_52 + 4
10: Commandaria_51
11: Outis_52 + 2
12: GrootJr_52 + 1
13: Tracker_50
14: Float294_53 + 1
15: Patio_54
16: Skysand_53
17: RedRaider_58
18: Lollipop1437_56
19: BiPauneto_52 + 3
20: NadineRae_50
21: HubbaBubba_47
22: Marietta_52
23: IDyn_51
24: WhoseManz_51
25: Scuba_58
26: Pleakley_58 + 1
27: HomeFry_55
28: Tiamoceli_41 + 5
29: Dexdert_41
30: GordDuk1_30 + 1
31: Gmala1_30
32: TPA2_25

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 347666 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347666 has 57 members, 8 are drafts.

Phages represented in each track:
- Track 1 : Turuncu_55
- Track 2 : Flapper_55
- Track 3 : Dalilpop_55
- Track 4 : GRU1_40
- Track 5 : GTE5_42
- Track 6 : Jifall16_49, Emianna_50, Kurt_50, KidneyBean_50, Phomeo_49, Arti_50, Foxboro_51
- Track 7 : GTE8_39
- Track 8 : NatB6_50, Wheezy_50
- Track 9 : Buggaboo_52, Kabluna_54, SuperSulley_52, Bonum_54, NosilaM_54
- Track 10 : Commandaria_51
- Track 11 : Outis_52, MerCougar_52, StarStruck_52
- Track 12 : GrootJr_52, NovumRegina_50
- Track 13 : Tracker_50
- Track 14 : Float294_53, Ennea_57
- Track 15 : Patio_54
- Track 16 : Skysand_53
- Track 17 : RedRaider_58
- Track 18 : Lollipop1437_56
- Track 19 : BiPauneto_52, Pemberton_52, Sukkupi_51, Yndexa_51
- Track 20 : NadineRae_50
- Track 21 : HubbaBubba_47
- Track 22 : Marietta_52
- Track 23 : IDyn_51
- Track 24 : WhoseManz_51
- Track 25 : Scuba_58
- Track 26 : Pleakley_58, Fury_58
- Track 27 : HomeFry_55
- Track 28 : Tiamoceli_41, EdmundFerry_39, Chickadee_40, RoadKill_38, GTE6_40, Twonlo_38
- Track 29 : Dexdert_41
- Track 30 : GordDuk1_30, GordTnk2_30
- Track 31 : Gmala1_30
- Track 32 : TPA2_25

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

The start number called the most often in the published annotations is 16, it was called in 22 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BiPauneto_52, Commandaria_51, Dalilpop_55, Ennea_57, Flapper_55, Float294_53, Fury_58, GRU1_40, HomeFry_55, HubbaBubba_47, IDyn_51, Lollipop1437_56, Marietta_52, NadineRae_50, Patio_54, Pemberton_52, Pleakley_58, RedRaider_58, Skysand_53, Sukkupi_51, Turuncu_55, WhoseManz_51, Yndexa_51,

Genes that have the "Most Annotated" start but do not call it:
• GTE5_42, Scuba_58,

Genes that do not have the "Most Annotated" start:
• Arti_50, Bonum_54, Buggaboo_52, Chickadee_40, Dexdert_41, EdmundFerry_39, Emianna_50, Foxboro_51, GTE6_40, GTE8_39, Gmala1_30, GordDuk1_30, GordTnk2_30, GrootJr_52, Jifall16_49, Kabluna_54, KidneyBean_50, Kurt_50, MerCougar_52, NatB6_50, NosilaM_54, NovumRegina_50, Outis_52, Phomeo_49, RoadKill_38, StarStruck_52, SuperSulley_52, TPA2_25, Tiamoceli_41, Tracker_50, Twonlo_38, Wheezy_50,

Summary by start number:

Start 4:
• Found in 1 of 57 (1.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GTE5_42 (CR1),

Start 10:
• Found in 3 of 57 (5.3%) of genes in pham
• Manual Annotations of this start: 1 of 49
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Scuba_58 (CR5),

Start 13:
• Found in 3 of 57 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gmala1_30 (DF1), GordDuk1_30 (DF1), GordTnk2_30 (DF1),

Start 15:
• Found in 21 of 57 (36.8%) of genes in pham
• Manual Annotations of this start: 20 of 49
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Arti_50 (CR2), Bonum_54 (CR2), Buggaboo_52 (CR2), Emianna_50 (CR2), Foxboro_51 (CR2), GrootJr_52 (CR2), Jifall16_49 (CR2), Kabluna_54 (CR2), KidneyBean_50 (CR2), Kurt_50 (CR2), MerCougar_52 (CR2), NatB6_50 (CR2), NosilaM_54 (CR2), NovumRegina_50

(CR2), Outis_52 (CR2), Phomeo_49 (CR2), StarStruck_52 (CR2), SuperSulley_52 (CR2), Tracker_50 (CR2), Wheezy_50 (CR2),

Start 16:
• Found in 25 of 57 (43.9%) of genes in pham
• Manual Annotations of this start: 22 of 49
• Called 92.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_52 (CR4), Commandaria_51 (CR2), Dalilpop_55 (CR1), Ennea_57 (CR3), Flapper_55 (CR1), Float294_53 (CR3), Fury_58 (CR5), GRU1_40 (CR1), HomeFry_55 (CR5), HubbaBubba_47 (CR4), IDyn_51 (CR4), Lollipop1437_56 (CR3), Marietta_52 (CR4), NadineRae_50 (CR4), Patio_54 (CR3), Pemberton_52 (CR4), Pleakley_58 (CR5), RedRaider_58 (CR3), Skysand_53 (CR3), Sukkupi_51 (CR4), Turuncu_55 (CR1), WhoseManz_51 (CR4), Yndexa_51 (CR4),

Start 18:
• Found in 8 of 57 (14.0%) of genes in pham
• Manual Annotations of this start: 6 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chickadee_40 (DE3), Dexdert_41 (DE3), EdmundFerry_39 (DE3), GTE6_40 (DE3), RoadKill_38 (DE3), TPA2_25 (singleton), Tiamoceli_41 (DE3), Twonlo_38 (DE3),

Start 23:
• Found in 24 of 57 (42.1%) of genes in pham
• No Manual Annotations of this start.
• Called 4.2% of time when present
• Phage (with cluster) where this start called: GTE8_39 (CR2),

Summary by clusters:

There are 8 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, DE3, DF1,

Info for manual annotations of cluster CR1:
•Start number 16 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 15 was manually annotated 20 times for cluster CR2.
•Start number 16 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 16 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 16 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 10 was manually annotated 1 time for cluster CR5.
•Start number 16 was manually annotated 3 times for cluster CR5.

Info for manual annotations of cluster DE3:
•Start number 18 was manually annotated 6 times for cluster DE3.

Gene Information:

Gene: Arti_50 Start: 38680, Stop: 39186, Start Num: 15
Candidate Starts for Arti_50:
(3, 38449), (Start: 15 @38680 has 20 MA's), (23, 38752), (31, 38827), (41, 38902), (42, 38905), (52, 38998), (54, 39010), (57, 39049), (62, 39097), (63, 39100), (68, 39127), (71, 39154),

Gene: BiPauneto_52 Start: 38203, Stop: 38706, Start Num: 16
Candidate Starts for BiPauneto_52:
(6, 38149), (8, 38161), (9, 38167), (Start: 16 @38203 has 22 MA's), (20, 38236), (38, 38404), (42, 38428), (44, 38437), (47, 38464), (51, 38515), (54, 38533), (57, 38572), (63, 38623), (67, 38647),

Gene: Bonum_54 Start: 39333, Stop: 39842, Start Num: 15
Candidate Starts for Bonum_54:
(3, 39102), (Start: 15 @39333 has 20 MA's), (47, 39591), (54, 39660), (58, 39708), (70, 39801), (71, 39807),

Gene: Buggaboo_52 Start: 39812, Stop: 40321, Start Num: 15
Candidate Starts for Buggaboo_52:
(3, 39581), (Start: 15 @39812 has 20 MA's), (47, 40070), (54, 40139), (58, 40187), (70, 40280), (71, 40286),

Gene: Chickadee_40 Start: 36048, Stop: 36539, Start Num: 18
Candidate Starts for Chickadee_40:
(Start: 18 @36048 has 6 MA's), (21, 36075), (27, 36135), (28, 36138), (30, 36156), (35, 36210), (46, 36276), (47, 36291), (50, 36336), (53, 36354), (57, 36399), (72, 36531),

Gene: Commandaria_51 Start: 39801, Stop: 40316, Start Num: 16
Candidate Starts for Commandaria_51:
(Start: 16 @39801 has 22 MA's), (17, 39810), (42, 40026), (57, 40170), (62, 40218), (71, 40281),

Gene: Dalilpop_55 Start: 40964, Stop: 41473, Start Num: 16
Candidate Starts for Dalilpop_55:
(Start: 16 @40964 has 22 MA's), (23, 41036), (41, 41186), (48, 41231), (52, 41282), (56, 41330), (57, 41333), (64, 41402), (71, 41441),

Gene: Dexdert_41 Start: 36308, Stop: 36799, Start Num: 18
Candidate Starts for Dexdert_41:
(Start: 18 @36308 has 6 MA's), (21, 36335), (27, 36395), (30, 36416), (35, 36470), (36, 36476), (47, 36551), (50, 36596), (53, 36614), (57, 36659),

Gene: EdmundFerry_39 Start: 36077, Stop: 36568, Start Num: 18
Candidate Starts for EdmundFerry_39:
(Start: 18 @36077 has 6 MA's), (21, 36104), (27, 36164), (28, 36167), (30, 36185), (35, 36239), (46, 36305), (47, 36320), (50, 36365), (53, 36383), (57, 36428), (72, 36560),

Gene: Emianna_50 Start: 39672, Stop: 40178, Start Num: 15
Candidate Starts for Emianna_50:

(3, 39441), (Start: 15 @39672 has 20 MA's), (23, 39744), (31, 39819), (41, 39894), (42, 39897), (52, 39990), (54, 40002), (57, 40041), (62, 40089), (63, 40092), (68, 40119), (71, 40146),

Gene: Ennea_57 Start: 40686, Stop: 41192, Start Num: 16
Candidate Starts for Ennea_57:
(5, 40611), (Start: 16 @40686 has 22 MA's), (23, 40758), (37, 40878), (41, 40908), (56, 41052), (57, 41055), (64, 41124), (70, 41154), (71, 41160),

Gene: Flapper_55 Start: 40395, Stop: 40904, Start Num: 16
Candidate Starts for Flapper_55:
(Start: 16 @40395 has 22 MA's), (22, 40455), (23, 40467), (41, 40617), (56, 40761), (57, 40764), (64, 40833), (71, 40872),

Gene: Float294_53 Start: 40128, Stop: 40634, Start Num: 16
Candidate Starts for Float294_53:
(5, 40053), (Start: 16 @40128 has 22 MA's), (23, 40200), (37, 40320), (41, 40350), (56, 40494), (57, 40497), (64, 40566), (70, 40596), (71, 40602),

Gene: Foxboro_51 Start: 40178, Stop: 40684, Start Num: 15
Candidate Starts for Foxboro_51:
(3, 39947), (Start: 15 @40178 has 20 MA's), (23, 40250), (31, 40325), (41, 40400), (42, 40403), (52, 40496), (54, 40508), (57, 40547), (62, 40595), (63, 40598), (68, 40625), (71, 40652),

Gene: Fury_58 Start: 38850, Stop: 39359, Start Num: 16
Candidate Starts for Fury_58:
(5, 38775), (7, 38793), (Start: 10 @38820 has 1 MA's), (Start: 16 @38850 has 22 MA's), (24, 38925), (31, 38997), (32, 39009), (37, 39042), (41, 39072), (50, 39156), (56, 39216), (57, 39219), (59, 39237), (63, 39270), (65, 39291),

Gene: GRU1_40 Start: 31942, Stop: 32451, Start Num: 16
Candidate Starts for GRU1_40:
(Start: 16 @31942 has 22 MA's), (22, 32002), (23, 32014), (41, 32164), (48, 32209), (56, 32308), (57, 32311), (64, 32380), (71, 32419),

Gene: GTE5_42 Start: 33174, Stop: 33761, Start Num: 4
Candidate Starts for GTE5_42:
(4, 33174), (Start: 16 @33252 has 22 MA's), (23, 33324), (41, 33474), (56, 33618), (57, 33621), (64, 33690), (71, 33729),

Gene: GTE6_40 Start: 36569, Stop: 37060, Start Num: 18
Candidate Starts for GTE6_40:
(Start: 18 @36569 has 6 MA's), (21, 36596), (27, 36656), (28, 36659), (30, 36677), (35, 36731), (46, 36797), (47, 36812), (50, 36857), (53, 36875), (57, 36920), (72, 37052),

Gene: GTE8_39 Start: 33002, Stop: 33436, Start Num: 23
Candidate Starts for GTE8_39:
(3, 32699), (Start: 15 @32930 has 20 MA's), (23, 33002), (31, 33077), (42, 33155), (54, 33260), (57, 33299), (62, 33347), (63, 33350), (68, 33377), (71, 33404),

Gene: Gmala1_30 Start: 35962, Stop: 36453, Start Num: 13
Candidate Starts for Gmala1_30:
(12, 35956), (13, 35962), (14, 35968), (26, 36055), (34, 36148), (38, 36172), (39, 36178), (40, 36181), (45, 36211), (46, 36217), (53, 36295), (66, 36409), (69, 36421),

Gene: GordDuk1_30 Start: 35900, Stop: 36391, Start Num: 13
Candidate Starts for GordDuk1_30:
(12, 35894), (13, 35900), (14, 35906), (26, 35993), (34, 36086), (39, 36116), (40, 36119), (45, 36149), (46, 36155), (53, 36233), (66, 36347), (69, 36359),

Gene: GordTnk2_30 Start: 35869, Stop: 36360, Start Num: 13
Candidate Starts for GordTnk2_30:
(12, 35863), (13, 35869), (14, 35875), (26, 35962), (34, 36055), (39, 36085), (40, 36088), (45, 36118), (46, 36124), (53, 36202), (66, 36316), (69, 36328),

Gene: GrootJr_52 Start: 39054, Stop: 39560, Start Num: 15
Candidate Starts for GrootJr_52:
(2, 38607), (3, 38823), (Start: 15 @39054 has 20 MA's), (23, 39126), (31, 39201), (41, 39276), (42, 39279), (52, 39372), (54, 39384), (57, 39423), (62, 39471), (63, 39474), (68, 39501), (71, 39528),

Gene: HomeFry_55 Start: 37501, Stop: 38010, Start Num: 16
Candidate Starts for HomeFry_55:
(Start: 16 @37501 has 22 MA's), (24, 37576), (29, 37618), (37, 37693), (56, 37867), (57, 37870), (59, 37888), (64, 37939),

Gene: HubbaBubba_47 Start: 35218, Stop: 35721, Start Num: 16
Candidate Starts for HubbaBubba_47:
(6, 35164), (9, 35182), (Start: 16 @35218 has 22 MA's), (19, 35242), (30, 35344), (38, 35419), (42, 35443), (44, 35452), (47, 35479), (54, 35548), (57, 35587), (63, 35638), (67, 35662), (71, 35695),

Gene: IDyn_51 Start: 36647, Stop: 37150, Start Num: 16
Candidate Starts for IDyn_51:
(8, 36605), (9, 36611), (Start: 16 @36647 has 22 MA's), (19, 36671), (42, 36872), (44, 36881), (47, 36908), (54, 36977), (57, 37016), (63, 37067), (67, 37091),

Gene: Jifall16_49 Start: 39326, Stop: 39832, Start Num: 15
Candidate Starts for Jifall16_49:
(3, 39095), (Start: 15 @39326 has 20 MA's), (23, 39398), (31, 39473), (41, 39548), (42, 39551), (52, 39644), (54, 39656), (57, 39695), (62, 39743), (63, 39746), (68, 39773), (71, 39800),

Gene: Kabluna_54 Start: 38748, Stop: 39257, Start Num: 15
Candidate Starts for Kabluna_54:
(3, 38517), (Start: 15 @38748 has 20 MA's), (47, 39006), (54, 39075), (58, 39123), (70, 39216), (71, 39222),

Gene: KidneyBean_50 Start: 39450, Stop: 39956, Start Num: 15
Candidate Starts for KidneyBean_50:
(3, 39219), (Start: 15 @39450 has 20 MA's), (23, 39522), (31, 39597), (41, 39672), (42, 39675), (52, 39768), (54, 39780), (57, 39819), (62, 39867), (63, 39870), (68, 39897), (71, 39924),

Gene: Kurt_50 Start: 39687, Stop: 40193, Start Num: 15
Candidate Starts for Kurt_50:
(3, 39456), (Start: 15 @39687 has 20 MA's), (23, 39759), (31, 39834), (41, 39909), (42, 39912), (52, 40005), (54, 40017), (57, 40056), (62, 40104), (63, 40107), (68, 40134), (71, 40161),

Gene: Lollipop1437_56 Start: 40674, Stop: 41180, Start Num: 16
Candidate Starts for Lollipop1437_56:

(5, 40599), (Start: 16 @40674 has 22 MA's), (23, 40746), (37, 40866), (42, 40899), (52, 40992), (56, 41040), (57, 41043), (64, 41112), (71, 41148),

Gene: Marietta_52 Start: 36541, Stop: 37044, Start Num: 16
Candidate Starts for Marietta_52:
(8, 36499), (9, 36505), (Start: 16 @36541 has 22 MA's), (19, 36565), (38, 36742), (42, 36766), (44, 36775), (47, 36802), (54, 36871), (57, 36910), (63, 36961), (67, 36985),

Gene: MerCougar_52 Start: 39950, Stop: 40459, Start Num: 15
Candidate Starts for MerCougar_52:
(3, 39719), (Start: 15 @39950 has 20 MA's), (42, 40172), (43, 40178), (47, 40208), (54, 40277), (58, 40325), (70, 40418), (71, 40424),

Gene: NadineRae_50 Start: 35788, Stop: 36291, Start Num: 16
Candidate Starts for NadineRae_50:
(6, 35734), (8, 35746), (9, 35752), (Start: 16 @35788 has 22 MA's), (20, 35821), (30, 35914), (33, 35956), (42, 36013), (44, 36022), (47, 36049), (54, 36118), (57, 36157), (63, 36208), (67, 36232),

Gene: NatB6_50 Start: 38744, Stop: 39250, Start Num: 15
Candidate Starts for NatB6_50:
(1, 38000), (3, 38513), (Start: 15 @38744 has 20 MA's), (23, 38816), (31, 38891), (41, 38966), (42, 38969), (52, 39062), (54, 39074), (57, 39113), (62, 39161), (63, 39164), (68, 39191), (71, 39218),

Gene: NosilaM_54 Start: 39645, Stop: 40154, Start Num: 15
Candidate Starts for NosilaM_54:
(3, 39414), (Start: 15 @39645 has 20 MA's), (47, 39903), (54, 39972), (58, 40020), (70, 40113), (71, 40119),

Gene: NovumRegina_50 Start: 39053, Stop: 39559, Start Num: 15
Candidate Starts for NovumRegina_50:
(2, 38606), (3, 38822), (Start: 15 @39053 has 20 MA's), (23, 39125), (31, 39200), (41, 39275), (42, 39278), (52, 39371), (54, 39383), (57, 39422), (62, 39470), (63, 39473), (68, 39500), (71, 39527),

Gene: Outis_52 Start: 39644, Stop: 40153, Start Num: 15
Candidate Starts for Outis_52:
(3, 39413), (Start: 15 @39644 has 20 MA's), (42, 39866), (43, 39872), (47, 39902), (54, 39971), (58, 40019), (70, 40112), (71, 40118),

Gene: Patio_54 Start: 39910, Stop: 40416, Start Num: 16
Candidate Starts for Patio_54:
(11, 39883), (Start: 16 @39910 has 22 MA's), (23, 39982), (37, 40102), (41, 40132), (56, 40276), (57, 40279), (64, 40348), (70, 40378), (71, 40384),

Gene: Pemberton_52 Start: 36520, Stop: 37023, Start Num: 16
Candidate Starts for Pemberton_52:
(6, 36466), (8, 36478), (9, 36484), (Start: 16 @36520 has 22 MA's), (20, 36553), (38, 36721), (42, 36745), (44, 36754), (47, 36781), (51, 36832), (54, 36850), (57, 36889), (63, 36940), (67, 36964),

Gene: Phomeo_49 Start: 39322, Stop: 39828, Start Num: 15
Candidate Starts for Phomeo_49:
(3, 39091), (Start: 15 @39322 has 20 MA's), (23, 39394), (31, 39469), (41, 39544), (42, 39547), (52, 39640), (54, 39652), (57, 39691), (62, 39739), (63, 39742), (68, 39769), (71, 39796),

Gene: Pleakley_58 Start: 38851, Stop: 39360, Start Num: 16
Candidate Starts for Pleakley_58:
(5, 38776), (7, 38794), (Start: 10 @38821 has 1 MA's), (Start: 16 @38851 has 22 MA's), (24, 38926), (31, 38998), (32, 39010), (37, 39043), (41, 39073), (50, 39157), (56, 39217), (57, 39220), (59, 39238), (63, 39271), (65, 39292),

Gene: RedRaider_58 Start: 41932, Stop: 42441, Start Num: 16
Candidate Starts for RedRaider_58:
(5, 41857), (9, 41890), (Start: 16 @41932 has 22 MA's), (22, 41992), (23, 42004), (31, 42079), (37, 42124), (56, 42298), (57, 42301), (64, 42370),

Gene: RoadKill_38 Start: 35572, Stop: 36063, Start Num: 18
Candidate Starts for RoadKill_38:
(Start: 18 @35572 has 6 MA's), (21, 35599), (27, 35659), (28, 35662), (30, 35680), (35, 35734), (46, 35800), (47, 35815), (50, 35860), (53, 35878), (57, 35923), (72, 36055),

Gene: Scuba_58 Start: 38895, Stop: 39434, Start Num: 10
Candidate Starts for Scuba_58:
(7, 38868), (Start: 10 @38895 has 1 MA's), (Start: 16 @38925 has 22 MA's), (24, 39000), (31, 39072), (32, 39084), (37, 39117), (56, 39291), (57, 39294), (59, 39312), (63, 39345), (65, 39366),

Gene: Skysand_53 Start: 40130, Stop: 40636, Start Num: 16
Candidate Starts for Skysand_53:
(5, 40055), (9, 40088), (Start: 16 @40130 has 22 MA's), (22, 40190), (23, 40202), (29, 40247), (37, 40322), (42, 40355), (56, 40496), (57, 40499), (63, 40550), (64, 40568), (68, 40577), (71, 40604),

Gene: StarStruck_52 Start: 39644, Stop: 40153, Start Num: 15
Candidate Starts for StarStruck_52:
(3, 39413), (Start: 15 @39644 has 20 MA's), (42, 39866), (43, 39872), (47, 39902), (54, 39971), (58, 40019), (70, 40112), (71, 40118),

Gene: Sukkupi_51 Start: 38094, Stop: 38597, Start Num: 16
Candidate Starts for Sukkupi_51:
(6, 38040), (8, 38052), (9, 38058), (Start: 16 @38094 has 22 MA's), (20, 38127), (38, 38295), (42, 38319), (44, 38328), (47, 38355), (51, 38406), (54, 38424), (57, 38463), (63, 38514), (67, 38538),

Gene: SuperSulley_52 Start: 39812, Stop: 40321, Start Num: 15
Candidate Starts for SuperSulley_52:
(3, 39581), (Start: 15 @39812 has 20 MA's), (47, 40070), (54, 40139), (58, 40187), (70, 40280), (71, 40286),

Gene: TPA2_25 Start: 16114, Stop: 16566, Start Num: 18
Candidate Starts for TPA2_25:
(Start: 18 @16114 has 6 MA's), (22, 16156), (25, 16174), (26, 16177), (35, 16276), (49, 16378), (50, 16402), (55, 16429), (57, 16465), (60, 16486), (61, 16498),

Gene: Tiamoceli_41 Start: 36905, Stop: 37396, Start Num: 18
Candidate Starts for Tiamoceli_41:
(Start: 18 @36905 has 6 MA's), (21, 36932), (27, 36992), (28, 36995), (30, 37013), (35, 37067), (46, 37133), (47, 37148), (50, 37193), (53, 37211), (57, 37256), (72, 37388),

Gene: Tracker_50 Start: 38471, Stop: 38977, Start Num: 15
Candidate Starts for Tracker_50:

(2, 38024), (3, 38240), (Start: 15 @38471 has 20 MA's), (23, 38543), (31, 38618), (42, 38696), (52, 38789), (54, 38801), (57, 38840), (62, 38888), (63, 38891), (68, 38918), (71, 38945),

Gene: Turuncu_55 Start: 40057, Stop: 40566, Start Num: 16
Candidate Starts for Turuncu_55:
(9, 40015), (Start: 16 @40057 has 22 MA's), (23, 40129), (41, 40279), (56, 40423), (57, 40426), (64, 40495), (71, 40534),

Gene: Twonlo_38 Start: 35523, Stop: 36014, Start Num: 18
Candidate Starts for Twonlo_38:
(Start: 18 @35523 has 6 MA's), (21, 35550), (27, 35610), (28, 35613), (30, 35631), (35, 35685), (46, 35751), (47, 35766), (50, 35811), (53, 35829), (57, 35874), (72, 36006),

Gene: Wheezy_50 Start: 38676, Stop: 39182, Start Num: 15
Candidate Starts for Wheezy_50:
(1, 37932), (3, 38445), (Start: 15 @38676 has 20 MA's), (23, 38748), (31, 38823), (41, 38898), (42, 38901), (52, 38994), (54, 39006), (57, 39045), (62, 39093), (63, 39096), (68, 39123), (71, 39150),

Gene: WhoseManz_51 Start: 36154, Stop: 36657, Start Num: 16
Candidate Starts for WhoseManz_51:
(8, 36112), (9, 36118), (Start: 16 @36154 has 22 MA's), (19, 36178), (20, 36187), (42, 36379), (44, 36388), (47, 36415), (54, 36484), (57, 36523), (63, 36574), (67, 36598),

Gene: Yndexa_51 Start: 38094, Stop: 38597, Start Num: 16
Candidate Starts for Yndexa_51:
(6, 38040), (8, 38052), (9, 38058), (Start: 16 @38094 has 22 MA's), (20, 38127), (38, 38295), (42, 38319), (44, 38328), (47, 38355), (51, 38406), (54, 38424), (57, 38463), (63, 38514), (67, 38538),