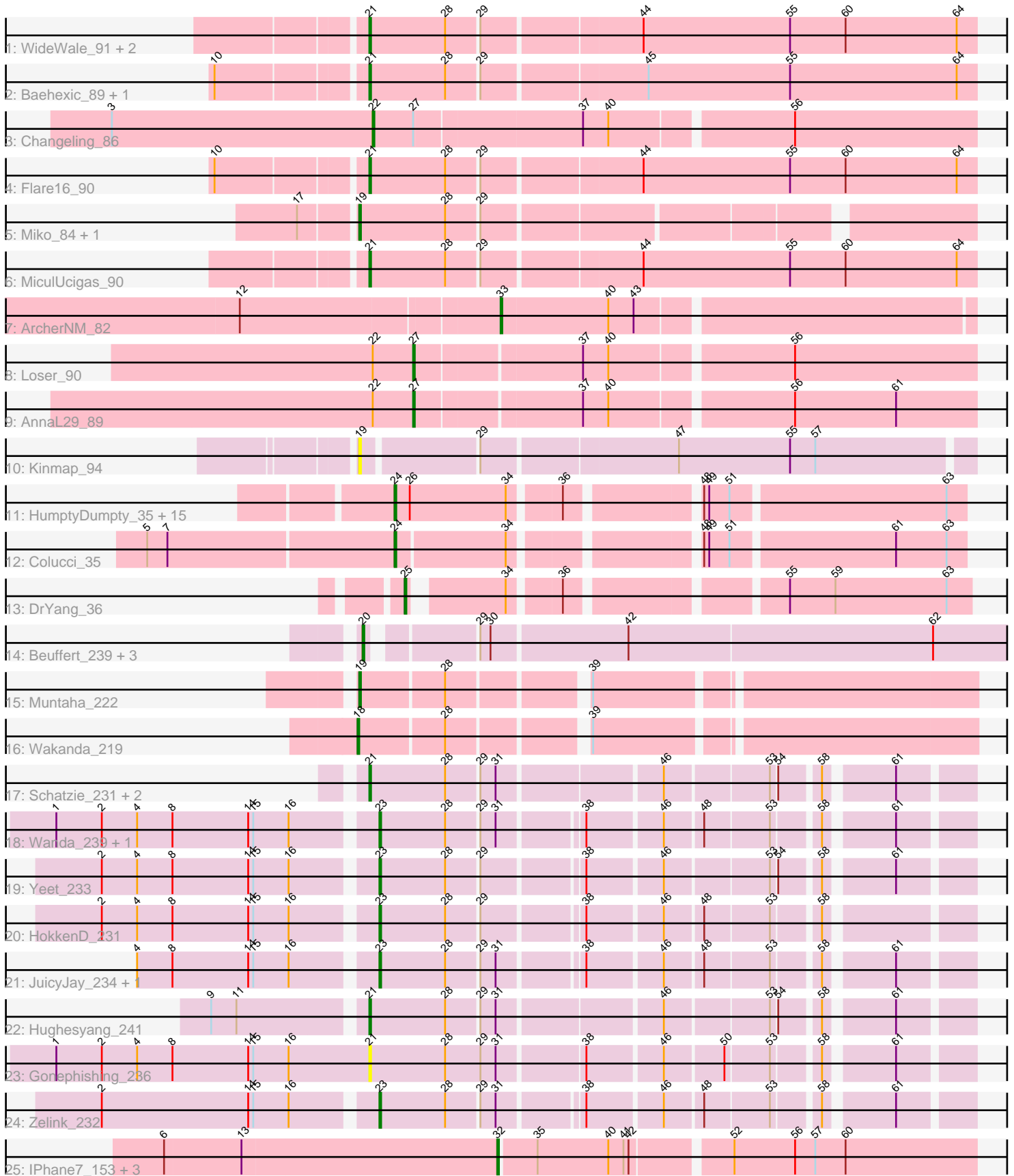


Pham 194057



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 194057 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194057 has 54 members, 3 are drafts.

Phages represented in each track:

- Track 1 : WideWale_91, Equemioh13_90, Updawg_91
- Track 2 : Baehexic_89, Centaur_90
- Track 3 : Changeling_86
- Track 4 : Flare16_90
- Track 5 : Miko_84, Rachaly_85
- Track 6 : MiculUcigas_90
- Track 7 : ArcherNM_82
- Track 8 : Loser_90
- Track 9 : AnnaL29_89
- Track 10 : Kinmap_94
- Track 11 : HumptyDumpty_35, RosiePosie_35, EdgarPoe_35, Linus_35, Tophat_35, Conboy_35, JayCookie_35, Chocolat_35, MoyaNatalis_35, Scavito_35, Chipper1996_350, Chubster_35, PrincessTrina_35, Mordred_35, JaNo_35, Kabreeze_35
- Track 12 : Colucci_35
- Track 13 : DrYang_36
- Track 14 : Beuffert_239, Blueeyedbeauty_241, Annadreamy_229, Limpid_236
- Track 15 : Muntaha_222
- Track 16 : Wakanda_219
- Track 17 : Schatzie_231, BAKA_241, Phoebus_237
- Track 18 : Wanda_239, Klein_247
- Track 19 : Yeet_233
- Track 20 : HokkenD_231
- Track 21 : JuicyJay_234, Beem_242
- Track 22 : Hughesyang_241
- Track 23 : Gonephishing_236
- Track 24 : Zelink_232
- Track 25 : IPhone7_153, TyDawg_149, Auspice_156, SlimJimmy_153

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

The start number called the most often in the published annotations is 24, it was called in 16 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chipper1996_350, Chocolat_35, Chubster_35, Colucci_35, Conboy_35, EdgarPoe_35, HumptyDumpty_35, JaNo_35, JayCookie_35, Kabreeze_35, Linus_35, Mordred_35, MoyaNatalis_35, PrincessTrina_35, RosiePosie_35, Scavito_35, Tophat_35,

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

-

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

- AnnaL29_89, Annadreamy_229, ArcherNM_82, Auspice_156, BAKA_241, Baehexic_89, Beem_242, Beuffert_239, Blueeyedbeauty_241, Centaur_90, Changeling_86, DrYang_36, Equemioh13_90, Flare16_90, Gonephishing_236, HokkenD_231, Hughesyang_241, IPhone7_153, JuicyJay_234, Kinmap_94, Klein_247, Limpid_236, Loser_90, MiculUcigas_90, Miko_84, Muntaha_222, Phoebus_237, Rachaly_85, Schatzie_231, SlimJimmy_153, TyDawg_149, Updawg_91, Wakanda_219, Wanda_239, WideWale_91, Yeet_233, Zelink_232,

Summary by start number:

Start 18:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wakanda_219 (BK2),

Start 19:

- Found in 4 of 54 (7.4%) of genes in pham
- Manual Annotations of this start: 3 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_94 (A21), Miko_84 (A2), Muntaha_222 (BK2), Rachaly_85 (A2),

Start 20:

- Found in 4 of 54 (7.4%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy_229 (BK1), Beuffert_239 (BK1), Blueeyedbeauty_241 (BK1), Limpid_236 (BK1),

Start 21:

- Found in 12 of 54 (22.2%) of genes in pham
- Manual Annotations of this start: 11 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA_241 (J), Baehexic_89 (A2), Centaur_90 (A2), Equemioh13_90 (A2), Flare16_90 (A2), Gonephishing_236 (J), Hughesyang_241 (J), MiculUcigas_90 (A2), Phoebus_237 (J), Schatzie_231 (J), Updawg_91 (A2), WideWale_91 (A2),

Start 22:

- Found in 3 of 54 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 33.3% of time when present

- Phage (with cluster) where this start called: Changeling_86 (A2),

Start 23:

- Found in 7 of 54 (13.0%) of genes in pham
- Manual Annotations of this start: 7 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beem_242 (J), HokkenD_231 (J), JuicyJay_234 (J), Klein_247 (J), Wanda_239 (J), Yeet_233 (J), Zelink_232 (J),

Start 24:

- Found in 17 of 54 (31.5%) of genes in pham
- Manual Annotations of this start: 16 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996_350 (AR), Chocolat_35 (AR), Chubster_35 (AR), Colucci_35 (AR), Conboy_35 (AR), EdgarPoe_35 (AR), HumptyDumpty_35 (AR), JaNo_35 (AR), JayCookie_35 (AR), Kabreeze_35 (AR), Linus_35 (AR), Mordred_35 (AR), MoyaNatalis_35 (AR), PrincessTrina_35 (AR), RosiePosie_35 (AR), Scavito_35 (AR), Tophat_35 (AR),

Start 25:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrYang_36 (AR),

Start 27:

- Found in 3 of 54 (5.6%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AnnaL29_89 (A2), Loser_90 (A2),

Start 32:

- Found in 4 of 54 (7.4%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice_156 (M1), IPhane7_153 (M1), SlimJimmy_153 (M1), TyDawg_149 (M1),

Start 33:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArcherNM_82 (A2),

Summary by clusters:

There are 7 clusters represented in this pham: A21, J, A2, M1, BK1, BK2, AR,

Info for manual annotations of cluster A2:

- Start number 19 was manually annotated 2 times for cluster A2.
- Start number 21 was manually annotated 7 times for cluster A2.
- Start number 22 was manually annotated 1 time for cluster A2.
- Start number 27 was manually annotated 2 times for cluster A2.

- Start number 33 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster AR:

- Start number 24 was manually annotated 16 times for cluster AR.
- Start number 25 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster BK1:

- Start number 20 was manually annotated 4 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 18 was manually annotated 1 time for cluster BK2.
- Start number 19 was manually annotated 1 time for cluster BK2.

Info for manual annotations of cluster J:

- Start number 21 was manually annotated 4 times for cluster J.
- Start number 23 was manually annotated 7 times for cluster J.

Info for manual annotations of cluster M1:

- Start number 32 was manually annotated 4 times for cluster M1.

Gene Information:

Gene: AnnaL29_89 Start: 49609, Stop: 49292, Start Num: 27

Candidate Starts for AnnaL29_89:

(Start: 22 @49633 has 1 MA's), (Start: 27 @49609 has 2 MA's), (37, 49516), (40, 49501), (56, 49399), (61, 49339),

Gene: Annadreamy_229 Start: 111840, Stop: 112202, Start Num: 20

Candidate Starts for Annadreamy_229:

(Start: 20 @111840 has 4 MA's), (29, 111894), (30, 111900), (42, 111978), (62, 112155),

Gene: ArcherNM_82 Start: 48789, Stop: 48520, Start Num: 33

Candidate Starts for ArcherNM_82:

(12, 48936), (Start: 33 @48789 has 1 MA's), (40, 48726), (43, 48711),

Gene: Auspice_156 Start: 78089, Stop: 77817, Start Num: 32

Candidate Starts for Auspice_156:

(6, 78284), (13, 78239), (Start: 32 @78089 has 4 MA's), (35, 78068), (40, 78026), (41, 78017), (42, 78014), (52, 77960), (56, 77924), (57, 77912), (60, 77894),

Gene: BAKA_241 Start: 110720, Stop: 110400, Start Num: 21

Candidate Starts for BAKA_241:

(Start: 21 @110720 has 11 MA's), (28, 110675), (29, 110657), (31, 110648), (46, 110558), (53, 110501), (54, 110498), (58, 110477), (61, 110441),

Gene: Baehexic_89 Start: 49622, Stop: 49272, Start Num: 21

Candidate Starts for Baehexic_89:

(10, 49703), (Start: 21 @49622 has 11 MA's), (28, 49577), (29, 49559), (45, 49466), (55, 49382), (64, 49283),

Gene: Beem_242 Start: 112166, Stop: 111855, Start Num: 23

Candidate Starts for Beem_242:

(4, 112301), (8, 112280), (14, 112235), (15, 112232), (16, 112211), (Start: 23 @112166 has 7 MA's), (28, 112127), (29, 112109), (31, 112100), (38, 112055), (46, 112013), (48, 111992), (53, 111956), (58, 111932), (61, 111896),

Gene: Beuffert_239 Start: 116330, Stop: 116692, Start Num: 20

Candidate Starts for Beuffert_239:

(Start: 20 @116330 has 4 MA's), (29, 116384), (30, 116390), (42, 116468), (62, 116645),

Gene: Blueeyedbeauty_241 Start: 116156, Stop: 116518, Start Num: 20

Candidate Starts for Blueeyedbeauty_241:

(Start: 20 @116156 has 4 MA's), (29, 116210), (30, 116216), (42, 116294), (62, 116471),

Gene: Centaur_90 Start: 49489, Stop: 49139, Start Num: 21

Candidate Starts for Centaur_90:

(10, 49570), (Start: 21 @49489 has 11 MA's), (28, 49444), (29, 49426), (45, 49333), (55, 49249), (64, 49150),

Gene: Changeling_86 Start: 49621, Stop: 49277, Start Num: 22

Candidate Starts for Changeling_86:

(3, 49774), (Start: 22 @49621 has 1 MA's), (Start: 27 @49597 has 2 MA's), (37, 49501), (40, 49486), (56, 49384),

Gene: Chipper1996_350 Start: 29519, Stop: 29208, Start Num: 24

Candidate Starts for Chipper1996_350:

(Start: 24 @29519 has 16 MA's), (26, 29510), (34, 29453), (36, 29426), (48, 29357), (49, 29354), (51, 29342), (63, 29219),

Gene: Chocolat_35 Start: 29519, Stop: 29208, Start Num: 24

Candidate Starts for Chocolat_35:

(Start: 24 @29519 has 16 MA's), (26, 29510), (34, 29453), (36, 29426), (48, 29357), (49, 29354), (51, 29342), (63, 29219),

Gene: Chubster_35 Start: 29291, Stop: 28980, Start Num: 24

Candidate Starts for Chubster_35:

(Start: 24 @29291 has 16 MA's), (26, 29282), (34, 29225), (36, 29198), (48, 29129), (49, 29126), (51, 29114), (63, 28991),

Gene: Colucci_35 Start: 29165, Stop: 28857, Start Num: 24

Candidate Starts for Colucci_35:

(5, 29309), (7, 29297), (Start: 24 @29165 has 16 MA's), (34, 29102), (48, 29006), (49, 29003), (51, 28991), (61, 28898), (63, 28868),

Gene: Conboy_35 Start: 29518, Stop: 29207, Start Num: 24

Candidate Starts for Conboy_35:

(Start: 24 @29518 has 16 MA's), (26, 29509), (34, 29452), (36, 29425), (48, 29356), (49, 29353), (51, 29341), (63, 29218),

Gene: DrYang_36 Start: 30909, Stop: 30613, Start Num: 25

Candidate Starts for DrYang_36:

(Start: 25 @30909 has 1 MA's), (34, 30861), (36, 30834), (55, 30720), (59, 30693), (63, 30627),

Gene: EdgarPoe_35 Start: 29518, Stop: 29207, Start Num: 24

Candidate Starts for EdgarPoe_35:

(Start: 24 @29518 has 16 MA's), (26, 29509), (34, 29452), (36, 29425), (48, 29356), (49, 29353), (51, 29341), (63, 29218),

Gene: Equemioh13_90 Start: 49724, Stop: 49374, Start Num: 21

Candidate Starts for Equemioh13_90:

(Start: 21 @49724 has 11 MA's), (28, 49679), (29, 49661), (44, 49571), (55, 49484), (60, 49451), (64, 49385),

Gene: Flare16_90 Start: 49539, Stop: 49189, Start Num: 21

Candidate Starts for Flare16_90:

(10, 49620), (Start: 21 @49539 has 11 MA's), (28, 49494), (29, 49476), (44, 49386), (55, 49299), (60, 49266), (64, 49200),

Gene: Gonephishing_236 Start: 109863, Stop: 109540, Start Num: 21

Candidate Starts for Gonephishing_236:

(1, 110049), (2, 110022), (4, 110001), (8, 109980), (14, 109935), (15, 109932), (16, 109911), (Start: 21 @109863 has 11 MA's), (28, 109818), (29, 109797), (31, 109788), (38, 109740), (46, 109698), (50, 109665), (53, 109641), (58, 109617), (61, 109581),

Gene: HokkenD_231 Start: 112106, Stop: 111795, Start Num: 23

Candidate Starts for HokkenD_231:

(2, 112262), (4, 112241), (8, 112220), (14, 112175), (15, 112172), (16, 112151), (Start: 23 @112106 has 7 MA's), (28, 112067), (29, 112049), (38, 111995), (46, 111953), (48, 111932), (53, 111896), (58, 111872),

Gene: Hughesyang_241 Start: 112144, Stop: 111824, Start Num: 21

Candidate Starts for Hughesyang_241:

(9, 112228), (11, 112213), (Start: 21 @112144 has 11 MA's), (28, 112099), (29, 112081), (31, 112072), (46, 111982), (53, 111925), (54, 111922), (58, 111901), (61, 111865),

Gene: HumptyDumpty_35 Start: 29517, Stop: 29206, Start Num: 24

Candidate Starts for HumptyDumpty_35:

(Start: 24 @29517 has 16 MA's), (26, 29508), (34, 29451), (36, 29424), (48, 29355), (49, 29352), (51, 29340), (63, 29217),

Gene: IPhane7_153 Start: 77705, Stop: 77433, Start Num: 32

Candidate Starts for IPhane7_153:

(6, 77900), (13, 77855), (Start: 32 @77705 has 4 MA's), (35, 77684), (40, 77642), (41, 77633), (42, 77630), (52, 77576), (56, 77540), (57, 77528), (60, 77510),

Gene: JaNo_35 Start: 29517, Stop: 29206, Start Num: 24

Candidate Starts for JaNo_35:

(Start: 24 @29517 has 16 MA's), (26, 29508), (34, 29451), (36, 29424), (48, 29355), (49, 29352), (51, 29340), (63, 29217),

Gene: JayCookie_35 Start: 29521, Stop: 29210, Start Num: 24

Candidate Starts for JayCookie_35:

(Start: 24 @29521 has 16 MA's), (26, 29512), (34, 29455), (36, 29428), (48, 29359), (49, 29356), (51, 29344), (63, 29221),

Gene: JuicyJay_234 Start: 112115, Stop: 111804, Start Num: 23

Candidate Starts for JuicyJay_234:

(4, 112250), (8, 112229), (14, 112184), (15, 112181), (16, 112160), (Start: 23 @112115 has 7 MA's), (28, 112076), (29, 112058), (31, 112049), (38, 112004), (46, 111962), (48, 111941), (53, 111905), (58, 111881), (61, 111845),

Gene: Kabreeze_35 Start: 29517, Stop: 29206, Start Num: 24

Candidate Starts for Kabreeze_35:

(Start: 24 @29517 has 16 MA's), (26, 29508), (34, 29451), (36, 29424), (48, 29355), (49, 29352), (51, 29340), (63, 29217),

Gene: Kinmap_94 Start: 48187, Stop: 47843, Start Num: 19

Candidate Starts for Kinmap_94:

(Start: 19 @48187 has 3 MA's), (29, 48124), (47, 48013), (55, 47947), (57, 47932),

Gene: Klein_247 Start: 111346, Stop: 111035, Start Num: 23

Candidate Starts for Klein_247:

(1, 111529), (2, 111502), (4, 111481), (8, 111460), (14, 111415), (15, 111412), (16, 111391), (Start: 23 @111346 has 7 MA's), (28, 111307), (29, 111289), (31, 111280), (38, 111235), (46, 111193), (48, 111172), (53, 111136), (58, 111112), (61, 111076),

Gene: Limpid_236 Start: 117153, Stop: 117515, Start Num: 20

Candidate Starts for Limpid_236:

(Start: 20 @117153 has 4 MA's), (29, 117207), (30, 117213), (42, 117291), (62, 117468),

Gene: Linus_35 Start: 29518, Stop: 29207, Start Num: 24

Candidate Starts for Linus_35:

(Start: 24 @29518 has 16 MA's), (26, 29509), (34, 29452), (36, 29425), (48, 29356), (49, 29353), (51, 29341), (63, 29218),

Gene: Loser_90 Start: 49859, Stop: 49542, Start Num: 27

Candidate Starts for Loser_90:

(Start: 22 @49883 has 1 MA's), (Start: 27 @49859 has 2 MA's), (37, 49766), (40, 49751), (56, 49649),

Gene: MiculUcigas_90 Start: 49442, Stop: 49092, Start Num: 21

Candidate Starts for MiculUcigas_90:

(Start: 21 @49442 has 11 MA's), (28, 49397), (29, 49379), (44, 49289), (55, 49202), (60, 49169), (64, 49103),

Gene: Miko_84 Start: 48454, Stop: 48119, Start Num: 19

Candidate Starts for Miko_84:

(17, 48484), (Start: 19 @48454 has 3 MA's), (28, 48403), (29, 48385),

Gene: Mordred_35 Start: 29517, Stop: 29206, Start Num: 24

Candidate Starts for Mordred_35:

(Start: 24 @29517 has 16 MA's), (26, 29508), (34, 29451), (36, 29424), (48, 29355), (49, 29352), (51, 29340), (63, 29217),

Gene: MoyaNatalis_35 Start: 29521, Stop: 29210, Start Num: 24

Candidate Starts for MoyaNatalis_35:

(Start: 24 @29521 has 16 MA's), (26, 29512), (34, 29455), (36, 29428), (48, 29359), (49, 29356), (51, 29344), (63, 29221),

Gene: Muntaha_222 Start: 108668, Stop: 109000, Start Num: 19

Candidate Starts for Muntaha_222:

(Start: 19 @108668 has 3 MA's), (28, 108716), (39, 108788),

Gene: Phoebus_237 Start: 113352, Stop: 113032, Start Num: 21

Candidate Starts for Phoebus_237:

(Start: 21 @113352 has 11 MA's), (28, 113307), (29, 113289), (31, 113280), (46, 113190), (53, 113133), (54, 113130), (58, 113109), (61, 113073),

Gene: PrincessTrina_35 Start: 29521, Stop: 29210, Start Num: 24

Candidate Starts for PrincessTrina_35:

(Start: 24 @29521 has 16 MA's), (26, 29512), (34, 29455), (36, 29428), (48, 29359), (49, 29356), (51, 29344), (63, 29221),

Gene: Rachaly_85 Start: 48597, Stop: 48262, Start Num: 19

Candidate Starts for Rachaly_85:

(17, 48627), (Start: 19 @48597 has 3 MA's), (28, 48546), (29, 48528),

Gene: RosiePosie_35 Start: 29520, Stop: 29209, Start Num: 24

Candidate Starts for RosiePosie_35:

(Start: 24 @29520 has 16 MA's), (26, 29511), (34, 29454), (36, 29427), (48, 29358), (49, 29355), (51, 29343), (63, 29220),

Gene: Scavito_35 Start: 29518, Stop: 29207, Start Num: 24

Candidate Starts for Scavito_35:

(Start: 24 @29518 has 16 MA's), (26, 29509), (34, 29452), (36, 29425), (48, 29356), (49, 29353), (51, 29341), (63, 29218),

Gene: Schatzie_231 Start: 110377, Stop: 110057, Start Num: 21

Candidate Starts for Schatzie_231:

(Start: 21 @110377 has 11 MA's), (28, 110332), (29, 110314), (31, 110305), (46, 110215), (53, 110158), (54, 110155), (58, 110134), (61, 110098),

Gene: SlimJimmy_153 Start: 78262, Stop: 77990, Start Num: 32

Candidate Starts for SlimJimmy_153:

(6, 78457), (13, 78412), (Start: 32 @78262 has 4 MA's), (35, 78241), (40, 78199), (41, 78190), (42, 78187), (52, 78133), (56, 78097), (57, 78085), (60, 78067),

Gene: Tophat_35 Start: 29519, Stop: 29208, Start Num: 24

Candidate Starts for Tophat_35:

(Start: 24 @29519 has 16 MA's), (26, 29510), (34, 29453), (36, 29426), (48, 29357), (49, 29354), (51, 29342), (63, 29219),

Gene: TyDawg_149 Start: 77708, Stop: 77436, Start Num: 32

Candidate Starts for TyDawg_149:

(6, 77903), (13, 77858), (Start: 32 @77708 has 4 MA's), (35, 77687), (40, 77645), (41, 77636), (42, 77633), (52, 77579), (56, 77543), (57, 77531), (60, 77513),

Gene: Updawg_91 Start: 49724, Stop: 49374, Start Num: 21

Candidate Starts for Updawg_91:

(Start: 21 @49724 has 11 MA's), (28, 49679), (29, 49661), (44, 49571), (55, 49484), (60, 49451), (64, 49385),

Gene: Wakanda_219 Start: 108031, Stop: 108363, Start Num: 18

Candidate Starts for Wakanda_219:

(Start: 18 @108031 has 1 MA's), (28, 108079), (39, 108151),

Gene: Wanda_239 Start: 108976, Stop: 108665, Start Num: 23

Candidate Starts for Wanda_239:

(1, 109159), (2, 109132), (4, 109111), (8, 109090), (14, 109045), (15, 109042), (16, 109021), (Start: 23 @108976 has 7 MA's), (28, 108937), (29, 108919), (31, 108910), (38, 108865), (46, 108823), (48, 108802), (53, 108766), (58, 108742), (61, 108706),

Gene: WideWale_91 Start: 49724, Stop: 49374, Start Num: 21

Candidate Starts for WideWale_91:

(Start: 21 @49724 has 11 MA's), (28, 49679), (29, 49661), (44, 49571), (55, 49484), (60, 49451), (64, 49385),

Gene: Yeet_233 Start: 110472, Stop: 110161, Start Num: 23

Candidate Starts for Yeet_233:

(2, 110628), (4, 110607), (8, 110586), (14, 110541), (15, 110538), (16, 110517), (Start: 23 @110472 has 7 MA's), (28, 110433), (29, 110415), (38, 110361), (46, 110319), (53, 110262), (54, 110259), (58, 110238), (61, 110202),

Gene: Zelink_232 Start: 110059, Stop: 109748, Start Num: 23

Candidate Starts for Zelink_232:

(2, 110215), (14, 110128), (15, 110125), (16, 110104), (Start: 23 @110059 has 7 MA's), (28, 110020), (29, 110002), (31, 109993), (38, 109948), (46, 109906), (48, 109885), (53, 109849), (58, 109825), (61, 109789),