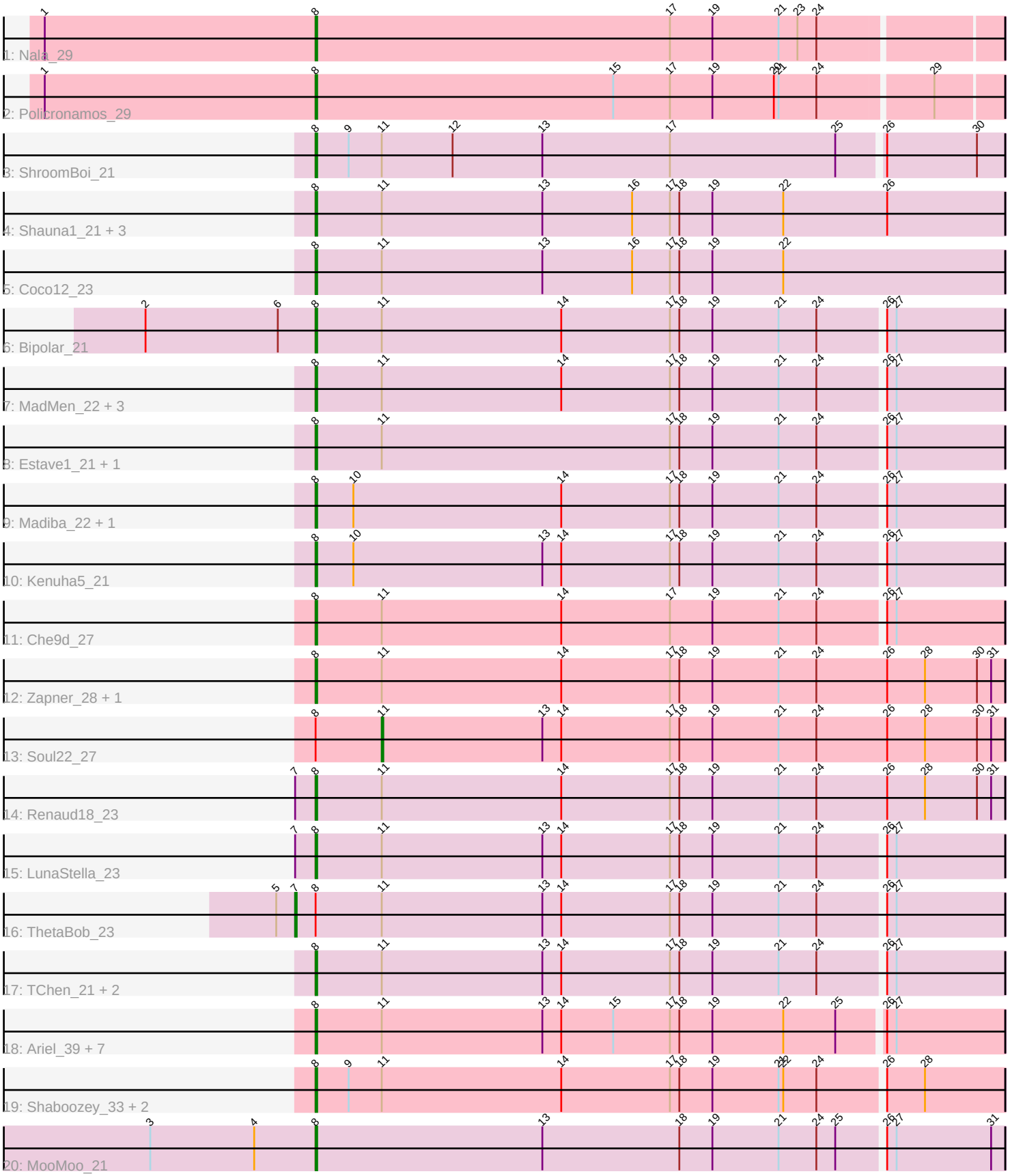
Pham 216335


1: Nala_29
2: Policronamos_29
3: ShroomBoi_21
4: Shauna1_21 + 3
5: Coco12_23
6: Bipolar_21
7: MadMen_22 + 3
8: Estave1_21 + 1
9: Madiba_22 + 1
10: Kenuha5_21
11: Che9d_27
12: Zapner_28 + 1
13: Soul22_27
14: Renaud18_23
15: LunaStella_23
16: ThetaBob_23
17: TChen_21 + 2
18: Ariel_39 + 7
19: Shaboozey_33 + 2
20: MooMoo_21

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 216335 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216335 has 40 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Nala_29
• Track 2 : Policronamos_29
• Track 3 : ShroomBoi_21
• Track 4 : Shauna1_21, Brookers_22, Phanphagia_21, Kingsley_22
• Track 5 : Coco12_23
• Track 6 : Bipolar_21
• Track 7 : MadMen_22, Avani_27, Ogopogo_24, Kersh_22
• Track 8 : Estave1_21, Cornie_23
• Track 9 : Madiba_22, Demsculpinboyz_27
• Track 10 : Kenuha5_21
• Track 11 : Che9d_27
• Track 12 : Zapner_28, Jabbawokkie_29
• Track 13 : Soul22_27
• Track 14 : Renaud18_23
• Track 15 : LunaStella_23
• Track 16 : ThetaBob_23
• Track 17 : TChen_21, Pollywog_24, Yoshi_27
• Track 18 : Ariel_39, Squint_38, Superphikiman_39, Lucky2013_39, MiaZeal_39, DmpstrDiver_40, Courthouse_39, Porcelain_38
• Track 19 : Shaboozey_33, KashFlow_33, Hannaconda_36
• Track 20 : MooMoo_21

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

The start number called the most often in the published annotations is 8, it was called in 36 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ariel_39, Avani_27, Bipolar_21, Brookers_22, Che9d_27, Coco12_23, Cornie_23, Courthouse_39, Demsculpinboyz_27, DmpstrDiver_40, Estave1_21, Hannaconda_36, Jabbawokkie_29, KashFlow_33, Kenuha5_21, Kersh_22, Kingsley_22, Lucky2013_39, LunaStella_23, MadMen_22, Madiba_22, MiaZeal_39, MooMoo_21, Nala_29, Ogopogo_24, Phanphagia_21, Policronamos_29, Pollywog_24, Porcelain_38, Renaud18_23, Shaboozey_33, Shauna1_21,

ShroomBoi_21, Squint_38, Superphikiman_39, TChen_21, Yoshi_27, Zapner_28,

Genes that have the "Most Annotated" start but do not call it:
• Soul22_27, ThetaBob_23,

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

Summary by start number:

Start 7:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 33.3% of time when present
• Phage (with cluster) where this start called: ThetaBob_23 (F4),

Start 8:
• Found in 40 of 40 (100.0%) of genes in pham
• Manual Annotations of this start: 36 of 38
• Called 95.0% of time when present
• Phage (with cluster) where this start called: Ariel_39 (J), Avani_27 (F2), Bipolar_21 (F1), Brookers_22 (F1), Che9d_27 (F2), Coco12_23 (F1), Cornie_23 (F5), Courthouse_39 (J), Demsculpinboyz_27 (F2), DmpstrDiver_40 (J), Estave1_21 (F1), Hannaconda_36 (J), Jabbawokkie_29 (F2), KashFlow_33 (J), Kenuha5_21 (F1), Kersh_22 (F1), Kingsley_22 (F1), Lucky2013_39 (J), LunaStella_23 (F4), MadMen_22 (F1), Madiba_22 (F1), MiaZeal_39 (J), MooMoo_21 (singleton), Nala_29 (E), Ogopogo_24 (F1), Phanphagia_21 (F1), Policronamos_29 (E), Pollywog_24 (F1), Porcelain_38 (J), Renaud18_23 (F4), Shaboozey_33 (J), Shauna1_21 (F1), ShroomBoi_21 (F1), Squint_38 (J), Superphikiman_39 (J), TChen_21 (F4), Yoshi_27 (F2), Zapner_28 (F2),

Start 11:
• Found in 34 of 40 (85.0%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Soul22_27 (F2),

Summary by clusters:

There are 7 clusters represented in this pham: F1, singleton, F4, F5, J, F2, E,

Info for manual annotations of cluster E:
•Start number 8 was manually annotated 2 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 8 was manually annotated 13 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 8 was manually annotated 6 times for cluster F2.
•Start number 11 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:
•Start number 7 was manually annotated 1 time for cluster F4.

•Start number 8 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 8 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster J:
•Start number 8 was manually annotated 10 times for cluster J.

Gene Information:

Gene: Ariel_39 Start: 33704, Stop: 34135, Start Num: 8
Candidate Starts for Ariel_39:
(Start: 8 @33704 has 36 MA's), (Start: 11 @33746 has 1 MA's), (13, 33848), (14, 33860), (15, 33893), (17, 33929), (18, 33935), (19, 33956), (22, 34001), (25, 34034), (26, 34061), (27, 34067),

Gene: Avani_27 Start: 23475, Stop: 23906, Start Num: 8
Candidate Starts for Avani_27:
(Start: 8 @23475 has 36 MA's), (Start: 11 @23517 has 1 MA's), (14, 23631), (17, 23700), (18, 23706), (19, 23727), (21, 23769), (24, 23793), (26, 23832), (27, 23838),

Gene: Bipolar_21 Start: 23745, Stop: 24176, Start Num: 8
Candidate Starts for Bipolar_21:
(2, 23637), (6, 23721), (Start: 8 @23745 has 36 MA's), (Start: 11 @23787 has 1 MA's), (14, 23901), (17, 23970), (18, 23976), (19, 23997), (21, 24039), (24, 24063), (26, 24102), (27, 24108),

Gene: Brookers_22 Start: 23575, Stop: 24012, Start Num: 8
Candidate Starts for Brookers_22:
(Start: 8 @23575 has 36 MA's), (Start: 11 @23617 has 1 MA's), (13, 23719), (16, 23776), (17, 23800), (18, 23806), (19, 23827), (22, 23872), (26, 23938),

Gene: Che9d_27 Start: 23483, Stop: 23914, Start Num: 8
Candidate Starts for Che9d_27:
(Start: 8 @23483 has 36 MA's), (Start: 11 @23525 has 1 MA's), (14, 23639), (17, 23708), (19, 23735), (21, 23777), (24, 23801), (26, 23840), (27, 23846),

Gene: Coco12_23 Start: 24119, Stop: 24556, Start Num: 8
Candidate Starts for Coco12_23:
(Start: 8 @24119 has 36 MA's), (Start: 11 @24161 has 1 MA's), (13, 24263), (16, 24320), (17, 24344), (18, 24350), (19, 24371), (22, 24416),

Gene: Cornie_23 Start: 24610, Stop: 25041, Start Num: 8
Candidate Starts for Cornie_23:
(Start: 8 @24610 has 36 MA's), (Start: 11 @24652 has 1 MA's), (17, 24835), (18, 24841), (19, 24862), (21, 24904), (24, 24928), (26, 24967), (27, 24973),

Gene: Courthouse_39 Start: 34108, Stop: 34539, Start Num: 8
Candidate Starts for Courthouse_39:
(Start: 8 @34108 has 36 MA's), (Start: 11 @34150 has 1 MA's), (13, 34252), (14, 34264), (15, 34297), (17, 34333), (18, 34339), (19, 34360), (22, 34405), (25, 34438), (26, 34465), (27, 34471),

Gene: Demsculpinboyz_27 Start: 23468, Stop: 23899, Start Num: 8

Candidate Starts for Demsculpinboyz_27:
(Start: 8 @23468 has 36 MA's), (10, 23492), (14, 23624), (17, 23693), (18, 23699), (19, 23720), (21, 23762), (24, 23786), (26, 23825), (27, 23831),

Gene: DmpstrDiver_40 Start: 36756, Stop: 37187, Start Num: 8
Candidate Starts for DmpstrDiver_40:
(Start: 8 @36756 has 36 MA's), (Start: 11 @36798 has 1 MA's), (13, 36900), (14, 36912), (15, 36945), (17, 36981), (18, 36987), (19, 37008), (22, 37053), (25, 37086), (26, 37113), (27, 37119),

Gene: Estave1_21 Start: 23840, Stop: 24271, Start Num: 8
Candidate Starts for Estave1_21:
(Start: 8 @23840 has 36 MA's), (Start: 11 @23882 has 1 MA's), (17, 24065), (18, 24071), (19, 24092), (21, 24134), (24, 24158), (26, 24197), (27, 24203),

Gene: Hannaconda_36 Start: 32698, Stop: 33129, Start Num: 8
Candidate Starts for Hannaconda_36:
(Start: 8 @32698 has 36 MA's), (9, 32719), (Start: 11 @32740 has 1 MA's), (14, 32854), (17, 32923), (18, 32929), (19, 32950), (21, 32992), (22, 32995), (24, 33016), (26, 33055), (28, 33079),

Gene: Jabbawokkie_29 Start: 24166, Stop: 24603, Start Num: 8
Candidate Starts for Jabbawokkie_29:
(Start: 8 @24166 has 36 MA's), (Start: 11 @24208 has 1 MA's), (14, 24322), (17, 24391), (18, 24397), (19, 24418), (21, 24460), (24, 24484), (26, 24529), (28, 24553), (30, 24586), (31, 24595),

Gene: KashFlow_33 Start: 32319, Stop: 32750, Start Num: 8
Candidate Starts for KashFlow_33:
(Start: 8 @32319 has 36 MA's), (9, 32340), (Start: 11 @32361 has 1 MA's), (14, 32475), (17, 32544), (18, 32550), (19, 32571), (21, 32613), (22, 32616), (24, 32637), (26, 32676), (28, 32700),

Gene: Kenuha5_21 Start: 23861, Stop: 24292, Start Num: 8
Candidate Starts for Kenuha5_21:
(Start: 8 @23861 has 36 MA's), (10, 23885), (13, 24005), (14, 24017), (17, 24086), (18, 24092), (19, 24113), (21, 24155), (24, 24179), (26, 24218), (27, 24224),

Gene: Kersh_22 Start: 23904, Stop: 24335, Start Num: 8
Candidate Starts for Kersh_22:
(Start: 8 @23904 has 36 MA's), (Start: 11 @23946 has 1 MA's), (14, 24060), (17, 24129), (18, 24135), (19, 24156), (21, 24198), (24, 24222), (26, 24261), (27, 24267),

Gene: Kingsley_22 Start: 23580, Stop: 24017, Start Num: 8
Candidate Starts for Kingsley_22:
(Start: 8 @23580 has 36 MA's), (Start: 11 @23622 has 1 MA's), (13, 23724), (16, 23781), (17, 23805), (18, 23811), (19, 23832), (22, 23877), (26, 23943),

Gene: Lucky2013_39 Start: 34235, Stop: 34666, Start Num: 8
Candidate Starts for Lucky2013_39:
(Start: 8 @34235 has 36 MA's), (Start: 11 @34277 has 1 MA's), (13, 34379), (14, 34391), (15, 34424), (17, 34460), (18, 34466), (19, 34487), (22, 34532), (25, 34565), (26, 34592), (27, 34598),

Gene: LunaStella_23 Start: 24249, Stop: 24680, Start Num: 8
Candidate Starts for LunaStella_23:
(Start: 7 @24237 has 1 MA's), (Start: 8 @24249 has 36 MA's), (Start: 11 @24291 has 1 MA's), (13, 24393), (14, 24405), (17, 24474), (18, 24480), (19, 24501), (21, 24543), (24, 24567), (26, 24606), (27,

24612),

Gene: MadMen_22 Start: 23958, Stop: 24389, Start Num: 8
Candidate Starts for MadMen_22:
(Start: 8 @23958 has 36 MA's), (Start: 11 @24000 has 1 MA's), (14, 24114), (17, 24183), (18, 24189), (19, 24210), (21, 24252), (24, 24276), (26, 24315), (27, 24321),

Gene: Madiba_22 Start: 23608, Stop: 24039, Start Num: 8
Candidate Starts for Madiba_22:
(Start: 8 @23608 has 36 MA's), (10, 23632), (14, 23764), (17, 23833), (18, 23839), (19, 23860), (21, 23902), (24, 23926), (26, 23965), (27, 23971),

Gene: MiaZeal_39 Start: 33919, Stop: 34350, Start Num: 8
Candidate Starts for MiaZeal_39:
(Start: 8 @33919 has 36 MA's), (Start: 11 @33961 has 1 MA's), (13, 34063), (14, 34075), (15, 34108), (17, 34144), (18, 34150), (19, 34171), (22, 34216), (25, 34249), (26, 34276), (27, 34282),

Gene: MooMoo_21 Start: 23416, Stop: 23847, Start Num: 8
Candidate Starts for MooMoo_21:
(3, 23311), (4, 23377), (Start: 8 @23416 has 36 MA's), (13, 23560), (18, 23647), (19, 23668), (21, 23710), (24, 23734), (25, 23746), (26, 23773), (27, 23779), (31, 23839),

Gene: Nala_29 Start: 28568, Stop: 28996, Start Num: 8
Candidate Starts for Nala_29:
(1, 28397), (Start: 8 @28568 has 36 MA's), (17, 28793), (19, 28820), (21, 28862), (23, 28874), (24, 28886),

Gene: Ogopogo_24 Start: 24068, Stop: 24499, Start Num: 8
Candidate Starts for Ogopogo_24:
(Start: 8 @24068 has 36 MA's), (Start: 11 @24110 has 1 MA's), (14, 24224), (17, 24293), (18, 24299), (19, 24320), (21, 24362), (24, 24386), (26, 24425), (27, 24431),

Gene: Phanphagia_21 Start: 23774, Stop: 24211, Start Num: 8
Candidate Starts for Phanphagia_21:
(Start: 8 @23774 has 36 MA's), (Start: 11 @23816 has 1 MA's), (13, 23918), (16, 23975), (17, 23999), (18, 24005), (19, 24026), (22, 24071), (26, 24137),

Gene: Policronamos_29 Start: 28576, Stop: 29004, Start Num: 8
Candidate Starts for Policronamos_29:
(1, 28405), (Start: 8 @28576 has 36 MA's), (15, 28765), (17, 28801), (19, 28828), (20, 28867), (21, 28870), (24, 28894), (29, 28963),

Gene: Pollywog_24 Start: 24938, Stop: 25369, Start Num: 8
Candidate Starts for Pollywog_24:
(Start: 8 @24938 has 36 MA's), (Start: 11 @24980 has 1 MA's), (13, 25082), (14, 25094), (17, 25163), (18, 25169), (19, 25190), (21, 25232), (24, 25256), (26, 25295), (27, 25301),

Gene: Porcelain_38 Start: 33919, Stop: 34350, Start Num: 8
Candidate Starts for Porcelain_38:
(Start: 8 @33919 has 36 MA's), (Start: 11 @33961 has 1 MA's), (13, 34063), (14, 34075), (15, 34108), (17, 34144), (18, 34150), (19, 34171), (22, 34216), (25, 34249), (26, 34276), (27, 34282),

Gene: Renaud18_23 Start: 24145, Stop: 24582, Start Num: 8

Candidate Starts for Renaud18_23:
(Start: 7 @24133 has 1 MA's), (Start: 8 @24145 has 36 MA's), (Start: 11 @24187 has 1 MA's), (14, 24301), (17, 24370), (18, 24376), (19, 24397), (21, 24439), (24, 24463), (26, 24508), (28, 24532), (30, 24565), (31, 24574),

Gene: Shaboozey_33 Start: 32243, Stop: 32674, Start Num: 8
Candidate Starts for Shaboozey_33:
(Start: 8 @32243 has 36 MA's), (9, 32264), (Start: 11 @32285 has 1 MA's), (14, 32399), (17, 32468), (18, 32474), (19, 32495), (21, 32537), (22, 32540), (24, 32561), (26, 32600), (28, 32624),

Gene: Shauna1_21 Start: 23777, Stop: 24214, Start Num: 8
Candidate Starts for Shauna1_21:
(Start: 8 @23777 has 36 MA's), (Start: 11 @23819 has 1 MA's), (13, 23921), (16, 23978), (17, 24002), (18, 24008), (19, 24029), (22, 24074), (26, 24140),

Gene: ShroomBoi_21 Start: 23747, Stop: 24178, Start Num: 8
Candidate Starts for ShroomBoi_21:
(Start: 8 @23747 has 36 MA's), (9, 23768), (Start: 11 @23789 has 1 MA's), (12, 23834), (13, 23891), (17, 23972), (25, 24077), (26, 24104), (30, 24161),

Gene: Soul22_27 Start: 23516, Stop: 23911, Start Num: 11
Candidate Starts for Soul22_27:
(Start: 8 @23474 has 36 MA's), (Start: 11 @23516 has 1 MA's), (13, 23618), (14, 23630), (17, 23699), (18, 23705), (19, 23726), (21, 23768), (24, 23792), (26, 23837), (28, 23861), (30, 23894), (31, 23903),

Gene: Squint_38 Start: 34038, Stop: 34469, Start Num: 8
Candidate Starts for Squint_38:
(Start: 8 @34038 has 36 MA's), (Start: 11 @34080 has 1 MA's), (13, 34182), (14, 34194), (15, 34227), (17, 34263), (18, 34269), (19, 34290), (22, 34335), (25, 34368), (26, 34395), (27, 34401),

Gene: Superphikiman_39 Start: 34101, Stop: 34532, Start Num: 8
Candidate Starts for Superphikiman_39:
(Start: 8 @34101 has 36 MA's), (Start: 11 @34143 has 1 MA's), (13, 34245), (14, 34257), (15, 34290), (17, 34326), (18, 34332), (19, 34353), (22, 34398), (25, 34431), (26, 34458), (27, 34464),

Gene: TChen_21 Start: 24250, Stop: 24681, Start Num: 8
Candidate Starts for TChen_21:
(Start: 8 @24250 has 36 MA's), (Start: 11 @24292 has 1 MA's), (13, 24394), (14, 24406), (17, 24475), (18, 24481), (19, 24502), (21, 24544), (24, 24568), (26, 24607), (27, 24613),

Gene: ThetaBob_23 Start: 24052, Stop: 24495, Start Num: 7
Candidate Starts for ThetaBob_23:
(5, 24040), (Start: 7 @24052 has 1 MA's), (Start: 8 @24064 has 36 MA's), (Start: 11 @24106 has 1 MA's), (13, 24208), (14, 24220), (17, 24289), (18, 24295), (19, 24316), (21, 24358), (24, 24382), (26, 24421), (27, 24427),

Gene: Yoshi_27 Start: 23473, Stop: 23904, Start Num: 8
Candidate Starts for Yoshi_27:
(Start: 8 @23473 has 36 MA's), (Start: 11 @23515 has 1 MA's), (13, 23617), (14, 23629), (17, 23698), (18, 23704), (19, 23725), (21, 23767), (24, 23791), (26, 23830), (27, 23836),

Gene: Zapner_28 Start: 24167, Stop: 24604, Start Num: 8
Candidate Starts for Zapner_28:

(Start: 8 @24167 has 36 MA's), (Start: 11 @24209 has 1 MA's), (14, 24323), (17, 24392), (18, 24398), (19, 24419), (21, 24461), (24, 24485), (26, 24530), (28, 24554), (30, 24587), (31, 24596),