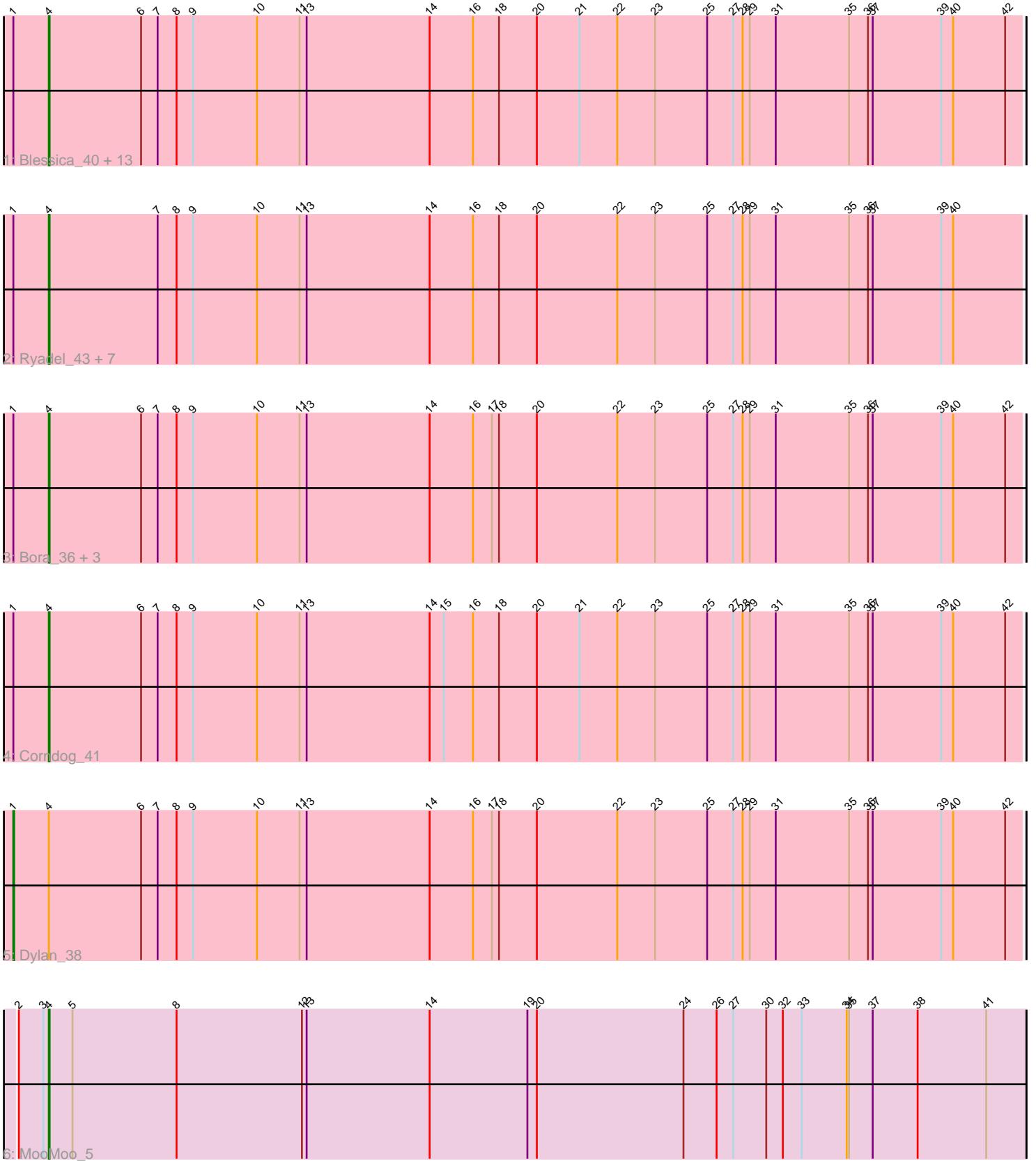


# Pham 3291



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 3291 Report

This analysis was run 04/05/24 on database version 557.

Pham number 3291 has 29 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Blessica\_40, Familton\_40, Shida\_39, Catdawg\_39, Idergollasper\_39, YungJamal\_42, Smooch\_41, JangDynasty\_39, Winget\_40, Wildflower\_37, Alkhayr\_37, TelAviv\_36, FoulBall\_36, SchoolBus\_39
- Track 2 : Ryadel\_43, Murai\_39, Krili\_38, MadKillah\_40, Schuy\_37, Mori\_38, Vorpps\_38, NiebruSaylor\_38
- Track 3 : Bora\_36, Firecracker\_39, Zakhe101\_39, Ashwin\_38
- Track 4 : Corndog\_41
- Track 5 : Dylan\_38
- Track 6 : MooMoo\_5

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

The start number called the most often in the published annotations is 4, it was called in 22 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alkhayr\_37, Ashwin\_38, Blessica\_40, Bora\_36, Catdawg\_39, Corndog\_41, Familton\_40, Firecracker\_39, FoulBall\_36, Idergollasper\_39, JangDynasty\_39, Krili\_38, MadKillah\_40, MooMoo\_5, Mori\_38, Murai\_39, NiebruSaylor\_38, Ryadel\_43, SchoolBus\_39, Schuy\_37, Shida\_39, Smooch\_41, TelAviv\_36, Vorpps\_38, Wildflower\_37, Winget\_40, YungJamal\_42, Zakhe101\_39,

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

- Dylan\_38,

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

- 

### **Summary by start number:**

Start 1:

- Found in 28 of 29 ( 96.6% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 3.6% of time when present

- Phage (with cluster) where this start called: Dylan\_38 (O),

Start 4:

- Found in 29 of 29 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 22 of 23
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Alkhayr\_37 (O), Ashwin\_38 (O), Blessica\_40 (O), Bora\_36 (O), Catdawg\_39 (O), Corndog\_41 (O), Familton\_40 (O), Firecracker\_39 (O), FoulBall\_36 (O), Idergollasper\_39 (O), JangDynasty\_39 (O), Krili\_38 (O), MadKillah\_40 (O), MooMoo\_5 (singleton), Mori\_38 (O), Murai\_39 (O), NiebruSaylor\_38 (O), Ryadel\_43 (O), SchoolBus\_39 (O), Schuy\_37 (O), Shida\_39 (O), Smooch\_41 (O), TelAviv\_36 (O), Vorrps\_38 (O), Wildflower\_37 (O), Winget\_40 (O), YungJamal\_42 (O), Zakhe101\_39 (O),

### **Summary by clusters:**

There are 2 clusters represented in this pham: singleton, O,

Info for manual annotations of cluster O:

- Start number 1 was manually annotated 1 time for cluster O.
- Start number 4 was manually annotated 21 times for cluster O.

### **Gene Information:**

Gene: Alkhayr\_37 Start: 19999, Stop: 21231, Start Num: 4

Candidate Starts for Alkhayr\_37:

(Start: 1 @19954 has 1 MA's), (Start: 4 @19999 has 22 MA's), (6, 20116), (7, 20137), (8, 20161), (9, 20182), (10, 20263), (11, 20317), (13, 20326), (14, 20482), (16, 20536), (18, 20569), (20, 20617), (21, 20671), (22, 20719), (23, 20767), (25, 20833), (27, 20866), (28, 20878), (29, 20887), (31, 20920), (35, 21013), (36, 21037), (37, 21043), (39, 21130), (40, 21145), (42, 21211),

Gene: Ashwin\_38 Start: 20009, Stop: 21241, Start Num: 4

Candidate Starts for Ashwin\_38:

(Start: 1 @19964 has 1 MA's), (Start: 4 @20009 has 22 MA's), (6, 20126), (7, 20147), (8, 20171), (9, 20192), (10, 20273), (11, 20327), (13, 20336), (14, 20492), (16, 20546), (17, 20570), (18, 20579), (20, 20627), (22, 20729), (23, 20777), (25, 20843), (27, 20876), (28, 20888), (29, 20897), (31, 20930), (35, 21023), (36, 21047), (37, 21053), (39, 21140), (40, 21155), (42, 21221),

Gene: Blessica\_40 Start: 20400, Stop: 21632, Start Num: 4

Candidate Starts for Blessica\_40:

(Start: 1 @20355 has 1 MA's), (Start: 4 @20400 has 22 MA's), (6, 20517), (7, 20538), (8, 20562), (9, 20583), (10, 20664), (11, 20718), (13, 20727), (14, 20883), (16, 20937), (18, 20970), (20, 21018), (21, 21072), (22, 21120), (23, 21168), (25, 21234), (27, 21267), (28, 21279), (29, 21288), (31, 21321), (35, 21414), (36, 21438), (37, 21444), (39, 21531), (40, 21546), (42, 21612),

Gene: Bora\_36 Start: 19462, Stop: 20694, Start Num: 4

Candidate Starts for Bora\_36:

(Start: 1 @19417 has 1 MA's), (Start: 4 @19462 has 22 MA's), (6, 19579), (7, 19600), (8, 19624), (9, 19645), (10, 19726), (11, 19780), (13, 19789), (14, 19945), (16, 19999), (17, 20023), (18, 20032), (20, 20080), (22, 20182), (23, 20230), (25, 20296), (27, 20329), (28, 20341), (29, 20350), (31, 20383), (35, 20476), (36, 20500), (37, 20506), (39, 20593), (40, 20608), (42, 20674),

Gene: Catdawg\_39 Start: 20089, Stop: 21321, Start Num: 4

Candidate Starts for Catdawg\_39:

(Start: 1 @20044 has 1 MA's), (Start: 4 @20089 has 22 MA's), (6, 20206), (7, 20227), (8, 20251), (9, 20272), (10, 20353), (11, 20407), (13, 20416), (14, 20572), (16, 20626), (18, 20659), (20, 20707), (21, 20761), (22, 20809), (23, 20857), (25, 20923), (27, 20956), (28, 20968), (29, 20977), (31, 21010), (35, 21103), (36, 21127), (37, 21133), (39, 21220), (40, 21235), (42, 21301),

Gene: Corndog\_41 Start: 20547, Stop: 21779, Start Num: 4

Candidate Starts for Corndog\_41:

(Start: 1 @20502 has 1 MA's), (Start: 4 @20547 has 22 MA's), (6, 20664), (7, 20685), (8, 20709), (9, 20730), (10, 20811), (11, 20865), (13, 20874), (14, 21030), (15, 21048), (16, 21084), (18, 21117), (20, 21165), (21, 21219), (22, 21267), (23, 21315), (25, 21381), (27, 21414), (28, 21426), (29, 21435), (31, 21468), (35, 21561), (36, 21585), (37, 21591), (39, 21678), (40, 21693), (42, 21759),

Gene: Dylan\_38 Start: 19769, Stop: 21046, Start Num: 1

Candidate Starts for Dylan\_38:

(Start: 1 @19769 has 1 MA's), (Start: 4 @19814 has 22 MA's), (6, 19931), (7, 19952), (8, 19976), (9, 19997), (10, 20078), (11, 20132), (13, 20141), (14, 20297), (16, 20351), (17, 20375), (18, 20384), (20, 20432), (22, 20534), (23, 20582), (25, 20648), (27, 20681), (28, 20693), (29, 20702), (31, 20735), (35, 20828), (36, 20852), (37, 20858), (39, 20945), (40, 20960), (42, 21026),

Gene: Familton\_40 Start: 20093, Stop: 21325, Start Num: 4

Candidate Starts for Familton\_40:

(Start: 1 @20048 has 1 MA's), (Start: 4 @20093 has 22 MA's), (6, 20210), (7, 20231), (8, 20255), (9, 20276), (10, 20357), (11, 20411), (13, 20420), (14, 20576), (16, 20630), (18, 20663), (20, 20711), (21, 20765), (22, 20813), (23, 20861), (25, 20927), (27, 20960), (28, 20972), (29, 20981), (31, 21014), (35, 21107), (36, 21131), (37, 21137), (39, 21224), (40, 21239), (42, 21305),

Gene: Firecracker\_39 Start: 19712, Stop: 20944, Start Num: 4

Candidate Starts for Firecracker\_39:

(Start: 1 @19667 has 1 MA's), (Start: 4 @19712 has 22 MA's), (6, 19829), (7, 19850), (8, 19874), (9, 19895), (10, 19976), (11, 20030), (13, 20039), (14, 20195), (16, 20249), (17, 20273), (18, 20282), (20, 20330), (22, 20432), (23, 20480), (25, 20546), (27, 20579), (28, 20591), (29, 20600), (31, 20633), (35, 20726), (36, 20750), (37, 20756), (39, 20843), (40, 20858), (42, 20924),

Gene: FoulBall\_36 Start: 20087, Stop: 21319, Start Num: 4

Candidate Starts for FoulBall\_36:

(Start: 1 @20042 has 1 MA's), (Start: 4 @20087 has 22 MA's), (6, 20204), (7, 20225), (8, 20249), (9, 20270), (10, 20351), (11, 20405), (13, 20414), (14, 20570), (16, 20624), (18, 20657), (20, 20705), (21, 20759), (22, 20807), (23, 20855), (25, 20921), (27, 20954), (28, 20966), (29, 20975), (31, 21008), (35, 21101), (36, 21125), (37, 21131), (39, 21218), (40, 21233), (42, 21299),

Gene: Idergollasper\_39 Start: 20087, Stop: 21319, Start Num: 4

Candidate Starts for Idergollasper\_39:

(Start: 1 @20042 has 1 MA's), (Start: 4 @20087 has 22 MA's), (6, 20204), (7, 20225), (8, 20249), (9, 20270), (10, 20351), (11, 20405), (13, 20414), (14, 20570), (16, 20624), (18, 20657), (20, 20705), (21, 20759), (22, 20807), (23, 20855), (25, 20921), (27, 20954), (28, 20966), (29, 20975), (31, 21008), (35, 21101), (36, 21125), (37, 21131), (39, 21218), (40, 21233), (42, 21299),

Gene: JangDynasty\_39 Start: 20182, Stop: 21414, Start Num: 4

Candidate Starts for JangDynasty\_39:

(Start: 1 @20137 has 1 MA's), (Start: 4 @20182 has 22 MA's), (6, 20299), (7, 20320), (8, 20344), (9, 20365), (10, 20446), (11, 20500), (13, 20509), (14, 20665), (16, 20719), (18, 20752), (20, 20800), (21, 20854), (22, 20902), (23, 20950), (25, 21016), (27, 21049), (28, 21061), (29, 21070), (31, 21103), (35, 21196), (36, 21220), (37, 21226), (39, 21313), (40, 21328), (42, 21394),

Gene: Krili\_38 Start: 19816, Stop: 21048, Start Num: 4

Candidate Starts for Krili\_38:

(Start: 1 @19771 has 1 MA's), (Start: 4 @19816 has 22 MA's), (7, 19954), (8, 19978), (9, 19999), (10, 20080), (11, 20134), (13, 20143), (14, 20299), (16, 20353), (18, 20386), (20, 20434), (22, 20536), (23, 20584), (25, 20650), (27, 20683), (28, 20695), (29, 20704), (31, 20737), (35, 20830), (36, 20854), (37, 20860), (39, 20947), (40, 20962),

Gene: MadKillah\_40 Start: 20026, Stop: 21258, Start Num: 4

Candidate Starts for MadKillah\_40:

(Start: 1 @19981 has 1 MA's), (Start: 4 @20026 has 22 MA's), (7, 20164), (8, 20188), (9, 20209), (10, 20290), (11, 20344), (13, 20353), (14, 20509), (16, 20563), (18, 20596), (20, 20644), (22, 20746), (23, 20794), (25, 20860), (27, 20893), (28, 20905), (29, 20914), (31, 20947), (35, 21040), (36, 21064), (37, 21070), (39, 21157), (40, 21172),

Gene: MooMoo\_5 Start: 3817, Stop: 5052, Start Num: 4

Candidate Starts for MooMoo\_5:

(2, 3781), (3, 3811), (Start: 4 @3817 has 22 MA's), (5, 3844), (8, 3976), (12, 4135), (13, 4141), (14, 4297), (19, 4420), (20, 4432), (24, 4618), (26, 4660), (27, 4681), (30, 4723), (32, 4744), (33, 4768), (34, 4825), (35, 4828), (37, 4858), (38, 4915), (41, 5002),

Gene: Mori\_38 Start: 19687, Stop: 20919, Start Num: 4

Candidate Starts for Mori\_38:

(Start: 1 @19642 has 1 MA's), (Start: 4 @19687 has 22 MA's), (7, 19825), (8, 19849), (9, 19870), (10, 19951), (11, 20005), (13, 20014), (14, 20170), (16, 20224), (18, 20257), (20, 20305), (22, 20407), (23, 20455), (25, 20521), (27, 20554), (28, 20566), (29, 20575), (31, 20608), (35, 20701), (36, 20725), (37, 20731), (39, 20818), (40, 20833),

Gene: Murai\_39 Start: 19877, Stop: 21109, Start Num: 4

Candidate Starts for Murai\_39:

(Start: 1 @19832 has 1 MA's), (Start: 4 @19877 has 22 MA's), (7, 20015), (8, 20039), (9, 20060), (10, 20141), (11, 20195), (13, 20204), (14, 20360), (16, 20414), (18, 20447), (20, 20495), (22, 20597), (23, 20645), (25, 20711), (27, 20744), (28, 20756), (29, 20765), (31, 20798), (35, 20891), (36, 20915), (37, 20921), (39, 21008), (40, 21023),

Gene: NiebruSaylor\_38 Start: 19688, Stop: 20920, Start Num: 4

Candidate Starts for NiebruSaylor\_38:

(Start: 1 @19643 has 1 MA's), (Start: 4 @19688 has 22 MA's), (7, 19826), (8, 19850), (9, 19871), (10, 19952), (11, 20006), (13, 20015), (14, 20171), (16, 20225), (18, 20258), (20, 20306), (22, 20408), (23, 20456), (25, 20522), (27, 20555), (28, 20567), (29, 20576), (31, 20609), (35, 20702), (36, 20726), (37, 20732), (39, 20819), (40, 20834),

Gene: Ryadel\_43 Start: 21167, Stop: 22399, Start Num: 4

Candidate Starts for Ryadel\_43:

(Start: 1 @21122 has 1 MA's), (Start: 4 @21167 has 22 MA's), (7, 21305), (8, 21329), (9, 21350), (10, 21431), (11, 21485), (13, 21494), (14, 21650), (16, 21704), (18, 21737), (20, 21785), (22, 21887), (23, 21935), (25, 22001), (27, 22034), (28, 22046), (29, 22055), (31, 22088), (35, 22181), (36, 22205), (37, 22211), (39, 22298), (40, 22313),

Gene: SchoolBus\_39 Start: 20090, Stop: 21322, Start Num: 4

Candidate Starts for SchoolBus\_39:

(Start: 1 @20045 has 1 MA's), (Start: 4 @20090 has 22 MA's), (6, 20207), (7, 20228), (8, 20252), (9, 20273), (10, 20354), (11, 20408), (13, 20417), (14, 20573), (16, 20627), (18, 20660), (20, 20708), (21, 20762), (22, 20810), (23, 20858), (25, 20924), (27, 20957), (28, 20969), (29, 20978), (31, 21011), (35, 21104), (36, 21128), (37, 21134), (39, 21221), (40, 21236), (42, 21302),

Gene: Schuy\_37 Start: 20035, Stop: 21267, Start Num: 4

Candidate Starts for Schuy\_37:

(Start: 1 @19990 has 1 MA's), (Start: 4 @20035 has 22 MA's), (7, 20173), (8, 20197), (9, 20218), (10, 20299), (11, 20353), (13, 20362), (14, 20518), (16, 20572), (18, 20605), (20, 20653), (22, 20755), (23, 20803), (25, 20869), (27, 20902), (28, 20914), (29, 20923), (31, 20956), (35, 21049), (36, 21073), (37, 21079), (39, 21166), (40, 21181),

Gene: Shida\_39 Start: 19942, Stop: 21174, Start Num: 4

Candidate Starts for Shida\_39:

(Start: 1 @19897 has 1 MA's), (Start: 4 @19942 has 22 MA's), (6, 20059), (7, 20080), (8, 20104), (9, 20125), (10, 20206), (11, 20260), (13, 20269), (14, 20425), (16, 20479), (18, 20512), (20, 20560), (21, 20614), (22, 20662), (23, 20710), (25, 20776), (27, 20809), (28, 20821), (29, 20830), (31, 20863), (35, 20956), (36, 20980), (37, 20986), (39, 21073), (40, 21088), (42, 21154),

Gene: Smooch\_41 Start: 21230, Stop: 22462, Start Num: 4

Candidate Starts for Smooch\_41:

(Start: 1 @21185 has 1 MA's), (Start: 4 @21230 has 22 MA's), (6, 21347), (7, 21368), (8, 21392), (9, 21413), (10, 21494), (11, 21548), (13, 21557), (14, 21713), (16, 21767), (18, 21800), (20, 21848), (21, 21902), (22, 21950), (23, 21998), (25, 22064), (27, 22097), (28, 22109), (29, 22118), (31, 22151), (35, 22244), (36, 22268), (37, 22274), (39, 22361), (40, 22376), (42, 22442),

Gene: TelAviv\_36 Start: 20084, Stop: 21316, Start Num: 4

Candidate Starts for TelAviv\_36:

(Start: 1 @20039 has 1 MA's), (Start: 4 @20084 has 22 MA's), (6, 20201), (7, 20222), (8, 20246), (9, 20267), (10, 20348), (11, 20402), (13, 20411), (14, 20567), (16, 20621), (18, 20654), (20, 20702), (21, 20756), (22, 20804), (23, 20852), (25, 20918), (27, 20951), (28, 20963), (29, 20972), (31, 21005), (35, 21098), (36, 21122), (37, 21128), (39, 21215), (40, 21230), (42, 21296),

Gene: Vorrps\_38 Start: 19688, Stop: 20920, Start Num: 4

Candidate Starts for Vorrps\_38:

(Start: 1 @19643 has 1 MA's), (Start: 4 @19688 has 22 MA's), (7, 19826), (8, 19850), (9, 19871), (10, 19952), (11, 20006), (13, 20015), (14, 20171), (16, 20225), (18, 20258), (20, 20306), (22, 20408), (23, 20456), (25, 20522), (27, 20555), (28, 20567), (29, 20576), (31, 20609), (35, 20702), (36, 20726), (37, 20732), (39, 20819), (40, 20834),

Gene: Wildflower\_37 Start: 19674, Stop: 20906, Start Num: 4

Candidate Starts for Wildflower\_37:

(Start: 1 @19629 has 1 MA's), (Start: 4 @19674 has 22 MA's), (6, 19791), (7, 19812), (8, 19836), (9, 19857), (10, 19938), (11, 19992), (13, 20001), (14, 20157), (16, 20211), (18, 20244), (20, 20292), (21, 20346), (22, 20394), (23, 20442), (25, 20508), (27, 20541), (28, 20553), (29, 20562), (31, 20595), (35, 20688), (36, 20712), (37, 20718), (39, 20805), (40, 20820), (42, 20886),

Gene: Winget\_40 Start: 20356, Stop: 21588, Start Num: 4

Candidate Starts for Winget\_40:

(Start: 1 @20311 has 1 MA's), (Start: 4 @20356 has 22 MA's), (6, 20473), (7, 20494), (8, 20518), (9, 20539), (10, 20620), (11, 20674), (13, 20683), (14, 20839), (16, 20893), (18, 20926), (20, 20974), (21,

(21028), (22, 21076), (23, 21124), (25, 21190), (27, 21223), (28, 21235), (29, 21244), (31, 21277), (35, 21370), (36, 21394), (37, 21400), (39, 21487), (40, 21502), (42, 21568),

Gene: YungJamal\_42 Start: 20419, Stop: 21651, Start Num: 4

Candidate Starts for YungJamal\_42:

(Start: 1 @20374 has 1 MA's), (Start: 4 @20419 has 22 MA's), (6, 20536), (7, 20557), (8, 20581), (9, 20602), (10, 20683), (11, 20737), (13, 20746), (14, 20902), (16, 20956), (18, 20989), (20, 21037), (21, 21091), (22, 21139), (23, 21187), (25, 21253), (27, 21286), (28, 21298), (29, 21307), (31, 21340), (35, 21433), (36, 21457), (37, 21463), (39, 21550), (40, 21565), (42, 21631),

Gene: Zakhe101\_39 Start: 19818, Stop: 21050, Start Num: 4

Candidate Starts for Zakhe101\_39:

(Start: 1 @19773 has 1 MA's), (Start: 4 @19818 has 22 MA's), (6, 19935), (7, 19956), (8, 19980), (9, 20001), (10, 20082), (11, 20136), (13, 20145), (14, 20301), (16, 20355), (17, 20379), (18, 20388), (20, 20436), (22, 20538), (23, 20586), (25, 20652), (27, 20685), (28, 20697), (29, 20706), (31, 20739), (35, 20832), (36, 20856), (37, 20862), (39, 20949), (40, 20964), (42, 21030),