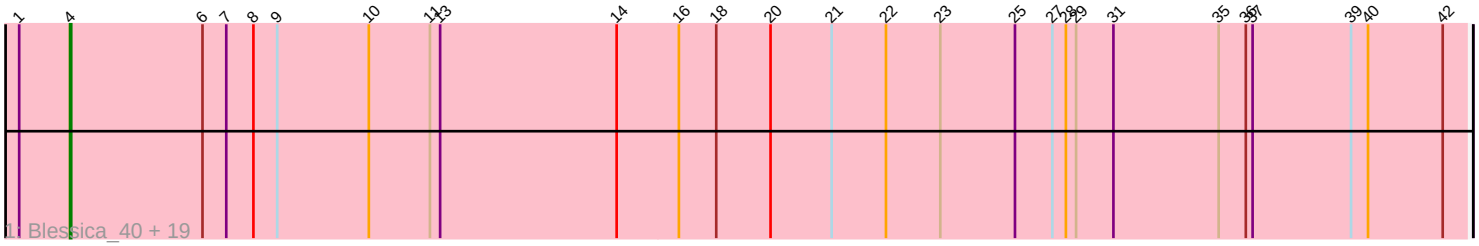
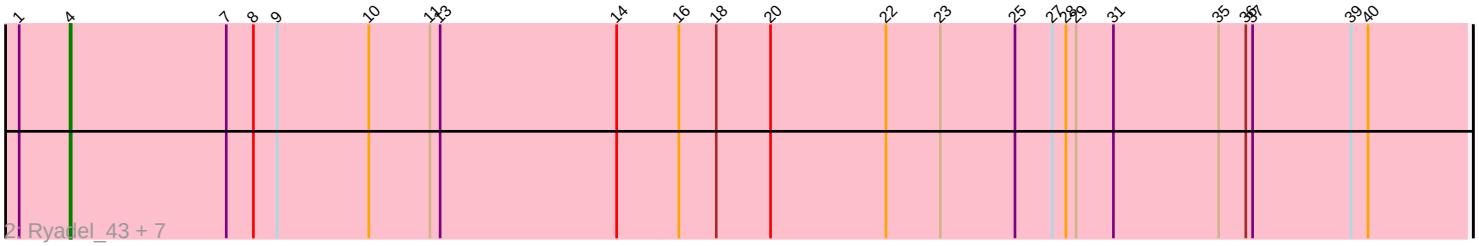
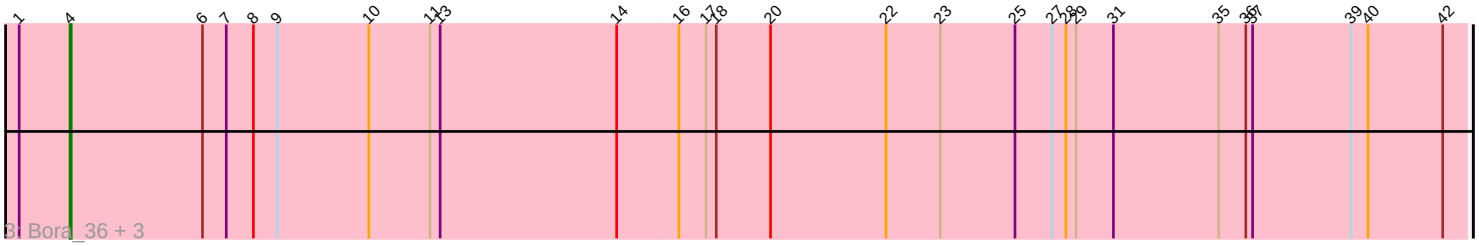
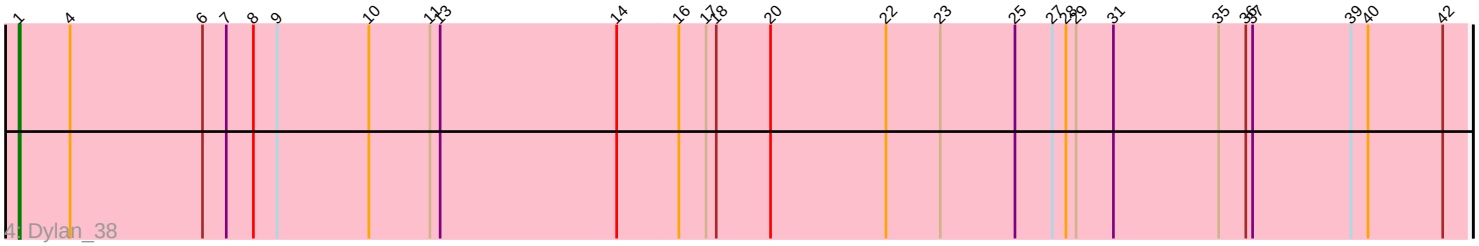
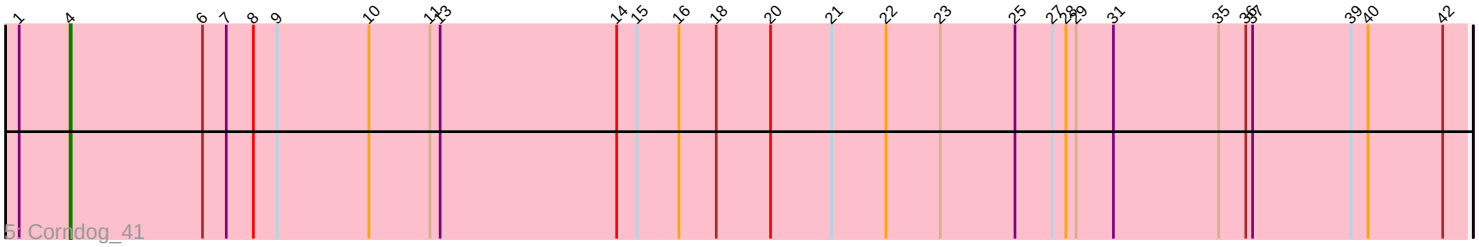
Pham 342373

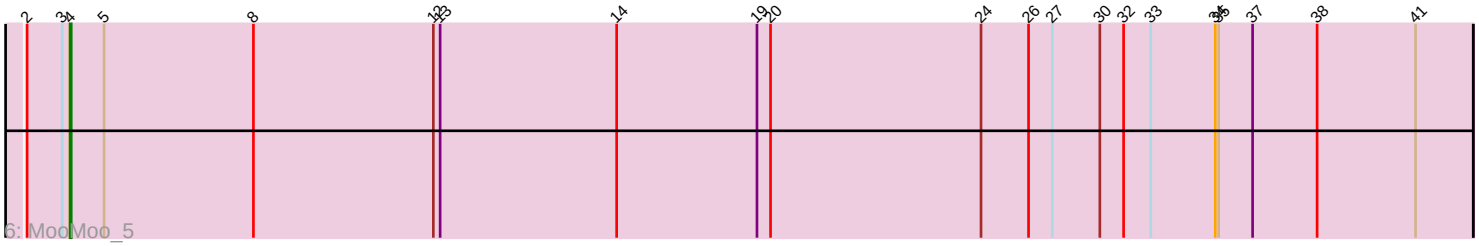

1: Blessica_40 + 19


2: Ryadel_43 + 7


3: Bora_36 + 3


4: Dylan_38


5: Corndog_41


6: MooMoo_5

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 342373 Report

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

Pham number 342373 has 35 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Blessica_40, Familton_40, Zebo_39, Shida_39, Catdawg_39, Idergollasper_39, KingPhillip3_39, JangDynasty_39, Wogge42_38, YoyoKar_37, YungJamal_42, Smooch_41, Imara_39, Winget_40, Alkhayr_39, Wildflower_39, TelAviv_36, FoulBall_39, SchoolBus_39, Vagabond_39
• Track 2 : Ryadel_43, Murai_39, MadKillah_40, Krili_38, Mori_38, Vorrps_38, NiebruSaylor_38, Schuy_40
• Track 3 : Bora_36, Firecracker_39, Ashwin_40, Zakhe101_39
• Track 4 : Dylan_38
• Track 5 : Corndog_41
• 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 32 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alkhayr_39, Ashwin_40, Blessica_40, Bora_36, Catdawg_39, Corndog_41, Familton_40, Firecracker_39, FoulBall_39, Idergollasper_39, Imara_39, JangDynasty_39, KingPhillip3_39, Krili_38, MadKillah_40, MooMoo_5, Mori_38, Murai_39, NiebruSaylor_38, Ryadel_43, SchoolBus_39, Schuy_40, Shida_39, Smooch_41, TelAviv_36, Vagabond_39, Vorrps_38, Wildflower_39, Winget_40, Wogge42_38, YoyoKar_37, YungJamal_42, Zakhe101_39, Zebo_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 34 of 35 (97.1%) of genes in pham

• Manual Annotations of this start: 1 of 33
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Dylan_38 (O),

Start 4:
• Found in 35 of 35 (100.0%) of genes in pham
• Manual Annotations of this start: 32 of 33
• Called 97.1% of time when present
• Phage (with cluster) where this start called: Alkhayr_39 (O), Ashwin_40 (O), Blessica_40 (O), Bora_36 (O), Catdawg_39 (O), Corndog_41 (O), Familton_40 (O), Firecracker_39 (O), FoulBall_39 (O), Idergollasper_39 (O), Imara_39 (O), JangDynasty_39 (O), KingPhillip3_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_40 (O), Shida_39 (O), Smooch_41 (O), TelAviv_36 (O), Vagabond_39 (O), Vorrps_38 (O), Wildflower_39 (O), Winget_40 (O), Wogge42_38 (O), YoyoKar_37 (O), YungJamal_42 (O), Zakhe101_39 (O), Zebo_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 31 times for cluster O.

Gene Information:

Gene: Alkhayr_39 Start: 19999, Stop: 21231, Start Num: 4
Candidate Starts for Alkhayr_39:
(Start: 1 @19954 has 1 MA's), (Start: 4 @19999 has 32 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_40 Start: 20009, Stop: 21241, Start Num: 4
Candidate Starts for Ashwin_40:
(Start: 1 @19964 has 1 MA's), (Start: 4 @20009 has 32 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 32 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 32 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 32 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 32 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 32 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 32 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 32 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_39 Start: 20087, Stop: 21319, Start Num: 4
Candidate Starts for FoulBall_39:
(Start: 1 @20042 has 1 MA's), (Start: 4 @20087 has 32 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 32 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: Imara_39 Start: 19896, Stop: 21128, Start Num: 4
Candidate Starts for Imara_39:
(Start: 1 @19851 has 1 MA's), (Start: 4 @19896 has 32 MA's), (6, 20013), (7, 20034), (8, 20058), (9, 20079), (10, 20160), (11, 20214), (13, 20223), (14, 20379), (16, 20433), (18, 20466), (20, 20514), (21, 20568), (22, 20616), (23, 20664), (25, 20730), (27, 20763), (28, 20775), (29, 20784), (31, 20817), (35, 20910), (36, 20934), (37, 20940), (39, 21027), (40, 21042), (42, 21108),

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 32 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: KingPhillip3_39 Start: 20087, Stop: 21319, Start Num: 4
Candidate Starts for KingPhillip3_39:
(Start: 1 @20042 has 1 MA's), (Start: 4 @20087 has 32 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: 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 32 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 32 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 32 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 32 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 32 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 32 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 32 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 32 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_40 Start: 20035, Stop: 21267, Start Num: 4
Candidate Starts for Schuy_40:
(Start: 1 @19990 has 1 MA's), (Start: 4 @20035 has 32 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 32 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 32 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 32 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: Vagabond_39 Start: 19917, Stop: 21149, Start Num: 4

Candidate Starts for Vagabond_39:
(Start: 1 @19872 has 1 MA's), (Start: 4 @19917 has 32 MA's), (6, 20034), (7, 20055), (8, 20079), (9, 20100), (10, 20181), (11, 20235), (13, 20244), (14, 20400), (16, 20454), (18, 20487), (20, 20535), (21, 20589), (22, 20637), (23, 20685), (25, 20751), (27, 20784), (28, 20796), (29, 20805), (31, 20838), (35, 20931), (36, 20955), (37, 20961), (39, 21048), (40, 21063), (42, 21129),

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 32 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_39 Start: 19674, Stop: 20906, Start Num: 4
Candidate Starts for Wildflower_39:
(Start: 1 @19629 has 1 MA's), (Start: 4 @19674 has 32 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 32 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: Wogge42_38 Start: 19995, Stop: 21227, Start Num: 4
Candidate Starts for Wogge42_38:
(Start: 1 @19950 has 1 MA's), (Start: 4 @19995 has 32 MA's), (6, 20112), (7, 20133), (8, 20157), (9, 20178), (10, 20259), (11, 20313), (13, 20322), (14, 20478), (16, 20532), (18, 20565), (20, 20613), (21, 20667), (22, 20715), (23, 20763), (25, 20829), (27, 20862), (28, 20874), (29, 20883), (31, 20916), (35, 21009), (36, 21033), (37, 21039), (39, 21126), (40, 21141), (42, 21207),

Gene: YoyoKar_37 Start: 19640, Stop: 20872, Start Num: 4
Candidate Starts for YoyoKar_37:
(Start: 1 @19595 has 1 MA's), (Start: 4 @19640 has 32 MA's), (6, 19757), (7, 19778), (8, 19802), (9, 19823), (10, 19904), (11, 19958), (13, 19967), (14, 20123), (16, 20177), (18, 20210), (20, 20258), (21, 20312), (22, 20360), (23, 20408), (25, 20474), (27, 20507), (28, 20519), (29, 20528), (31, 20561), (35, 20654), (36, 20678), (37, 20684), (39, 20771), (40, 20786), (42, 20852),

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 32 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 32 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),

Gene: Zebo_39 Start: 20090, Stop: 21322, Start Num: 4
Candidate Starts for Zebo_39:
(Start: 1 @20045 has 1 MA's), (Start: 4 @20090 has 32 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),