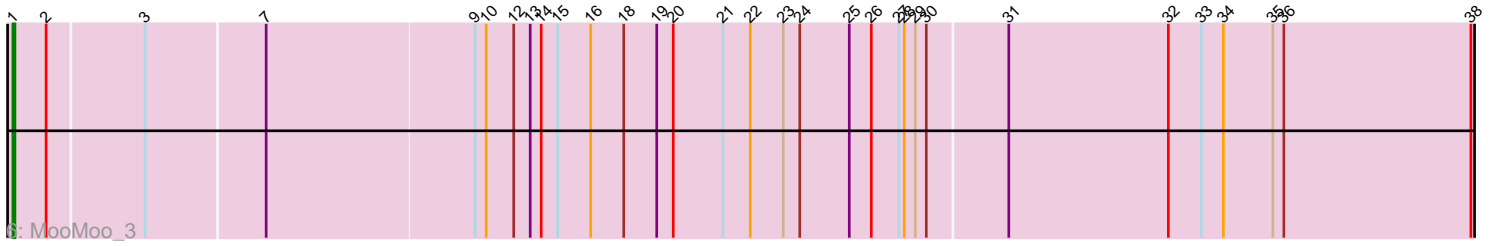
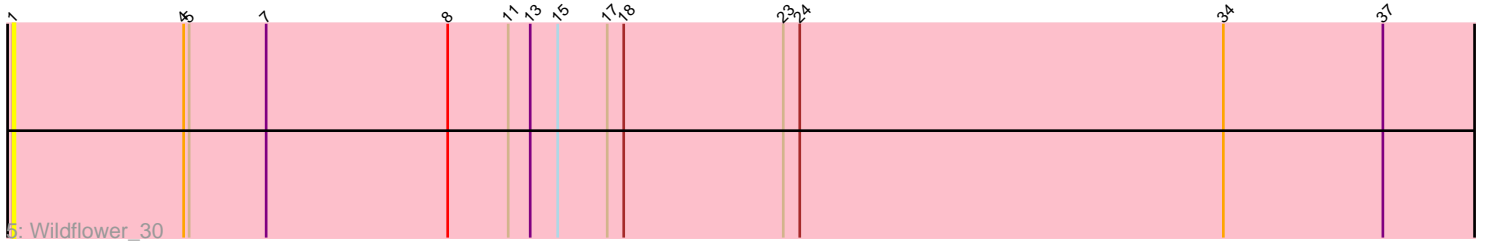
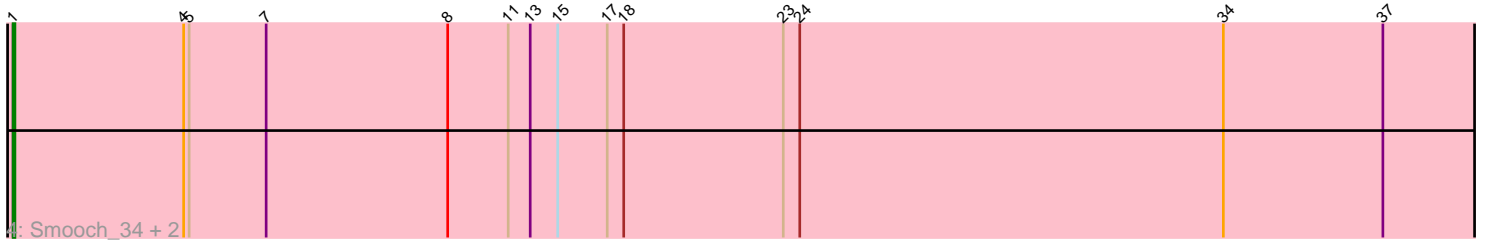
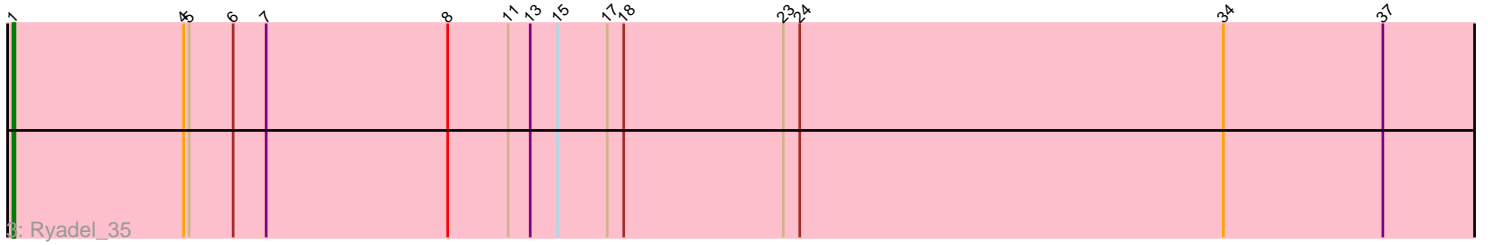
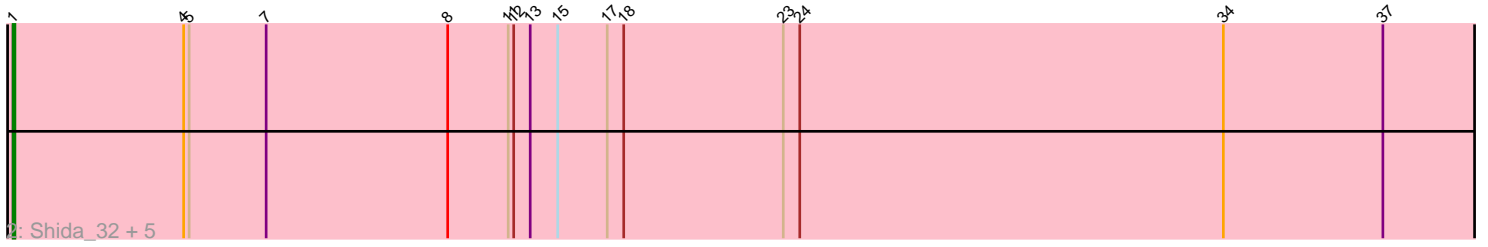
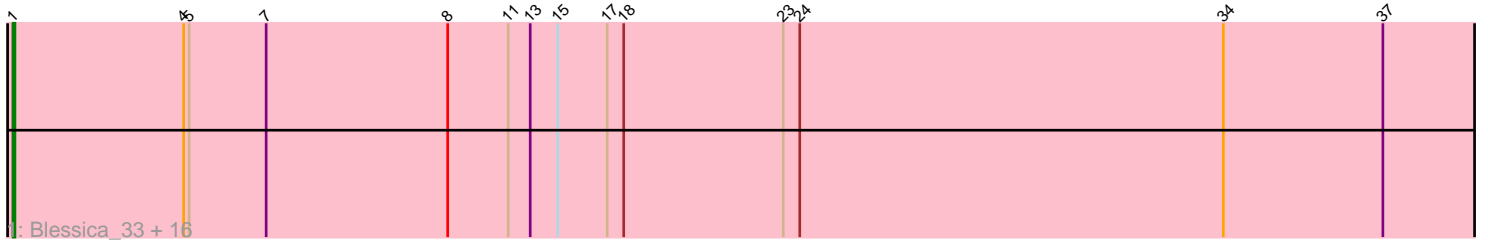


# Zoomed Pham 163058



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 163058 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163058 has 29 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Blessica\_33, Familton\_33, Firecracker\_32, JangDynasty\_32, Catdawg\_32, Idergollasper\_32, Zakhe101\_32, FoulBall\_29, YungJamal\_35, TelAviv\_29, Dylan\_31, Bora\_29, MadKillah\_33, Ashwin\_31, Alkhayr\_30, SchoolBus\_32, Winget\_33
- Track 2 : Shida\_32, Corndog\_34, Murai\_32, Schuy\_30, Krili\_31, NiebruSaylor\_31
- Track 3 : Ryadel\_35
- Track 4 : Smooch\_34, Vorrps\_31, Mori\_31
- Track 5 : Wildflower\_30
- Track 6 : MooMoo\_3

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

The start number called the most often in the published annotations is 1, it was called in 23 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alkhayr\_30, Ashwin\_31, Blessica\_33, Bora\_29, Catdawg\_32, Corndog\_34, Dylan\_31, Familton\_33, Firecracker\_32, FoulBall\_29, Idergollasper\_32, JangDynasty\_32, Krili\_31, MadKillah\_33, MooMoo\_3, Mori\_31, Murai\_32, NiebruSaylor\_31, Ryadel\_35, SchoolBus\_32, Schuy\_30, Shida\_32, Smooch\_34, TelAviv\_29, Vorrps\_31, Wildflower\_30, Winget\_33, YungJamal\_35, Zakhe101\_32,

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

- 

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

- 

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

Start 1:

- Found in 29 of 29 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 23 of 23
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Alkhayr\_30 (O), Ashwin\_31 (O), Blessica\_33 (O), Bora\_29 (O), Catdawg\_32 (O), Corndog\_34 (O), Dylan\_31 (O), Familton\_33 (O), Firecracker\_32 (O), FoulBall\_29 (O), Idergollasper\_32 (O), JangDynasty\_32 (O), Krili\_31 (O), MadKillah\_33 (O), MooMoo\_3 (singleton), Mori\_31 (O), Murai\_32 (O), NiebruSaylor\_31 (O), Ryadel\_35 (O), SchoolBus\_32 (O), Schuy\_30 (O), Shida\_32 (O), Smooch\_34 (O), TelAviv\_29 (O), Vorrps\_31 (O), Wildflower\_30 (O), Winget\_33 (O), YungJamal\_35 (O), Zakhe101\_32 (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 22 times for cluster O.

### Gene Information:

Gene: Alkhayr\_30 Start: 15001, Stop: 16230, Start Num: 1

Candidate Starts for Alkhayr\_30:

(Start: 1 @15001 has 23 MA's), (4, 15094), (5, 15097), (7, 15139), (8, 15238), (11, 15271), (13, 15283), (15, 15298), (17, 15325), (18, 15334), (23, 15421), (24, 15430), (34, 15661), (37, 15748), (39, 15799), (40, 15835), (42, 15859), (44, 15907), (45, 15922), (49, 16021), (50, 16024), (55, 16105), (56, 16132), (58, 16147), (59, 16150), (61, 16174), (63, 16204), (64, 16225),

Gene: Ashwin\_31 Start: 15011, Stop: 16240, Start Num: 1

Candidate Starts for Ashwin\_31:

(Start: 1 @15011 has 23 MA's), (4, 15104), (5, 15107), (7, 15149), (8, 15248), (11, 15281), (13, 15293), (15, 15308), (17, 15335), (18, 15344), (23, 15431), (24, 15440), (34, 15671), (37, 15758), (39, 15809), (40, 15845), (42, 15869), (44, 15917), (45, 15932), (49, 16031), (50, 16034), (55, 16115), (56, 16142), (58, 16157), (59, 16160), (61, 16184), (63, 16214), (64, 16235),

Gene: Blessica\_33 Start: 15402, Stop: 16631, Start Num: 1

Candidate Starts for Blessica\_33:

(Start: 1 @15402 has 23 MA's), (4, 15495), (5, 15498), (7, 15540), (8, 15639), (11, 15672), (13, 15684), (15, 15699), (17, 15726), (18, 15735), (23, 15822), (24, 15831), (34, 16062), (37, 16149), (39, 16200), (40, 16236), (42, 16260), (44, 16308), (45, 16323), (49, 16422), (50, 16425), (55, 16506), (56, 16533), (58, 16548), (59, 16551), (61, 16575), (63, 16605), (64, 16626),

Gene: Bora\_29 Start: 14464, Stop: 15693, Start Num: 1

Candidate Starts for Bora\_29:

(Start: 1 @14464 has 23 MA's), (4, 14557), (5, 14560), (7, 14602), (8, 14701), (11, 14734), (13, 14746), (15, 14761), (17, 14788), (18, 14797), (23, 14884), (24, 14893), (34, 15124), (37, 15211), (39, 15262), (40, 15298), (42, 15322), (44, 15370), (45, 15385), (49, 15484), (50, 15487), (55, 15568), (56, 15595), (58, 15610), (59, 15613), (61, 15637), (63, 15667), (64, 15688),

Gene: Catdawg\_32 Start: 15091, Stop: 16320, Start Num: 1

Candidate Starts for Catdawg\_32:

(Start: 1 @15091 has 23 MA's), (4, 15184), (5, 15187), (7, 15229), (8, 15328), (11, 15361), (13, 15373), (15, 15388), (17, 15415), (18, 15424), (23, 15511), (24, 15520), (34, 15751), (37, 15838), (39, 15889), (40, 15925), (42, 15949), (44, 15997), (45, 16012), (49, 16111), (50, 16114), (55, 16195), (56, 16222), (58, 16237), (59, 16240), (61, 16264), (63, 16294), (64, 16315),

Gene: Corndog\_34 Start: 15549, Stop: 16778, Start Num: 1

Candidate Starts for Corndog\_34:

(Start: 1 @15549 has 23 MA's), (4, 15642), (5, 15645), (7, 15687), (8, 15786), (11, 15819), (12, 15822), (13, 15831), (15, 15846), (17, 15873), (18, 15882), (23, 15969), (24, 15978), (34, 16209), (37, 16296), (39, 16347), (40, 16383), (42, 16407), (44, 16455), (49, 16569), (50, 16572), (55, 16653), (56, 16680), (58, 16695), (59, 16698), (61, 16722), (63, 16752), (64, 16773),

Gene: Dylan\_31 Start: 14816, Stop: 16045, Start Num: 1

Candidate Starts for Dylan\_31:

(Start: 1 @14816 has 23 MA's), (4, 14909), (5, 14912), (7, 14954), (8, 15053), (11, 15086), (13, 15098), (15, 15113), (17, 15140), (18, 15149), (23, 15236), (24, 15245), (34, 15476), (37, 15563), (39, 15614), (40, 15650), (42, 15674), (44, 15722), (45, 15737), (49, 15836), (50, 15839), (55, 15920), (56, 15947), (58, 15962), (59, 15965), (61, 15989), (63, 16019), (64, 16040),

Gene: Familton\_33 Start: 15095, Stop: 16324, Start Num: 1

Candidate Starts for Familton\_33:

(Start: 1 @15095 has 23 MA's), (4, 15188), (5, 15191), (7, 15233), (8, 15332), (11, 15365), (13, 15377), (15, 15392), (17, 15419), (18, 15428), (23, 15515), (24, 15524), (34, 15755), (37, 15842), (39, 15893), (40, 15929), (42, 15953), (44, 16001), (45, 16016), (49, 16115), (50, 16118), (55, 16199), (56, 16226), (58, 16241), (59, 16244), (61, 16268), (63, 16298), (64, 16319),

Gene: Firecracker\_32 Start: 14714, Stop: 15943, Start Num: 1

Candidate Starts for Firecracker\_32:

(Start: 1 @14714 has 23 MA's), (4, 14807), (5, 14810), (7, 14852), (8, 14951), (11, 14984), (13, 14996), (15, 15011), (17, 15038), (18, 15047), (23, 15134), (24, 15143), (34, 15374), (37, 15461), (39, 15512), (40, 15548), (42, 15572), (44, 15620), (45, 15635), (49, 15734), (50, 15737), (55, 15818), (56, 15845), (58, 15860), (59, 15863), (61, 15887), (63, 15917), (64, 15938),

Gene: FoulBall\_29 Start: 15089, Stop: 16318, Start Num: 1

Candidate Starts for FoulBall\_29:

(Start: 1 @15089 has 23 MA's), (4, 15182), (5, 15185), (7, 15227), (8, 15326), (11, 15359), (13, 15371), (15, 15386), (17, 15413), (18, 15422), (23, 15509), (24, 15518), (34, 15749), (37, 15836), (39, 15887), (40, 15923), (42, 15947), (44, 15995), (45, 16010), (49, 16109), (50, 16112), (55, 16193), (56, 16220), (58, 16235), (59, 16238), (61, 16262), (63, 16292), (64, 16313),

Gene: Idergollasper\_32 Start: 15089, Stop: 16318, Start Num: 1

Candidate Starts for Idergollasper\_32:

(Start: 1 @15089 has 23 MA's), (4, 15182), (5, 15185), (7, 15227), (8, 15326), (11, 15359), (13, 15371), (15, 15386), (17, 15413), (18, 15422), (23, 15509), (24, 15518), (34, 15749), (37, 15836), (39, 15887), (40, 15923), (42, 15947), (44, 15995), (45, 16010), (49, 16109), (50, 16112), (55, 16193), (56, 16220), (58, 16235), (59, 16238), (61, 16262), (63, 16292), (64, 16313),

Gene: JangDynasty\_32 Start: 15184, Stop: 16413, Start Num: 1

Candidate Starts for JangDynasty\_32:

(Start: 1 @15184 has 23 MA's), (4, 15277), (5, 15280), (7, 15322), (8, 15421), (11, 15454), (13, 15466), (15, 15481), (17, 15508), (18, 15517), (23, 15604), (24, 15613), (34, 15844), (37, 15931), (39, 15982), (40, 16018), (42, 16042), (44, 16090), (45, 16105), (49, 16204), (50, 16207), (55, 16288), (56, 16315), (58, 16330), (59, 16333), (61, 16357), (63, 16387), (64, 16408),

Gene: Krili\_31 Start: 14817, Stop: 16046, Start Num: 1

Candidate Starts for Krili\_31:

(Start: 1 @14817 has 23 MA's), (4, 14910), (5, 14913), (7, 14955), (8, 15054), (11, 15087), (12, 15090), (13, 15099), (15, 15114), (17, 15141), (18, 15150), (23, 15237), (24, 15246), (34, 15477), (37, 15564), (39, 15615), (40, 15651), (42, 15675), (44, 15723), (49, 15837), (50, 15840), (55, 15921), (56, 15948), (58, 15963), (59, 15966), (61, 15990), (63, 16020), (64, 16041),

Gene: MadKillah\_33 Start: 15027, Stop: 16256, Start Num: 1

Candidate Starts for MadKillah\_33:

(Start: 1 @15027 has 23 MA's), (4, 15120), (5, 15123), (7, 15165), (8, 15264), (11, 15297), (13, 15309), (15, 15324), (17, 15351), (18, 15360), (23, 15447), (24, 15456), (34, 15687), (37, 15774), (39, 15825), (40, 15861), (42, 15885), (44, 15933), (45, 15948), (49, 16047), (50, 16050), (55, 16131), (56, 16158), (58, 16173), (59, 16176), (61, 16200), (63, 16230), (64, 16251),

Gene: MooMoo\_3 Start: 1799, Stop: 3073, Start Num: 1

Candidate Starts for MooMoo\_3:

(Start: 1 @1799 has 23 MA's), (2, 1817), (3, 1868), (7, 1931), (9, 2042), (10, 2048), (12, 2063), (13, 2072), (14, 2078), (15, 2087), (16, 2105), (18, 2123), (19, 2141), (20, 2150), (21, 2177), (22, 2192), (23, 2210), (24, 2219), (25, 2246), (26, 2258), (27, 2273), (28, 2276), (29, 2282), (30, 2288), (31, 2330), (32, 2417), (33, 2435), (34, 2447), (35, 2474), (36, 2480), (38, 2582), (39, 2585), (40, 2621), (41, 2636), (43, 2681), (46, 2714), (47, 2735), (48, 2750), (49, 2807), (50, 2810), (51, 2819), (52, 2834), (54, 2858), (57, 2930), (60, 2972), (61, 2981), (62, 2990),

Gene: Mori\_31 Start: 14688, Stop: 15917, Start Num: 1

Candidate Starts for Mori\_31:

(Start: 1 @14688 has 23 MA's), (4, 14781), (5, 14784), (7, 14826), (8, 14925), (11, 14958), (13, 14970), (15, 14985), (17, 15012), (18, 15021), (23, 15108), (24, 15117), (34, 15348), (37, 15435), (39, 15486), (40, 15522), (42, 15546), (44, 15594), (49, 15708), (50, 15711), (55, 15792), (56, 15819), (58, 15834), (59, 15837), (61, 15861), (63, 15891), (64, 15912),

Gene: Murai\_32 Start: 14878, Stop: 16107, Start Num: 1

Candidate Starts for Murai\_32:

(Start: 1 @14878 has 23 MA's), (4, 14971), (5, 14974), (7, 15016), (8, 15115), (11, 15148), (12, 15151), (13, 15160), (15, 15175), (17, 15202), (18, 15211), (23, 15298), (24, 15307), (34, 15538), (37, 15625), (39, 15676), (40, 15712), (42, 15736), (44, 15784), (49, 15898), (50, 15901), (55, 15982), (56, 16009), (58, 16024), (59, 16027), (61, 16051), (63, 16081), (64, 16102),

Gene: NiebruSaylor\_31 Start: 14689, Stop: 15918, Start Num: 1

Candidate Starts for NiebruSaylor\_31:

(Start: 1 @14689 has 23 MA's), (4, 14782), (5, 14785), (7, 14827), (8, 14926), (11, 14959), (12, 14962), (13, 14971), (15, 14986), (17, 15013), (18, 15022), (23, 15109), (24, 15118), (34, 15349), (37, 15436), (39, 15487), (40, 15523), (42, 15547), (44, 15595), (49, 15709), (50, 15712), (55, 15793), (56, 15820), (58, 15835), (59, 15838), (61, 15862), (63, 15892), (64, 15913),

Gene: Ryadel\_35 Start: 15905, Stop: 17134, Start Num: 1

Candidate Starts for Ryadel\_35:

(Start: 1 @15905 has 23 MA's), (4, 15998), (5, 16001), (6, 16025), (7, 16043), (8, 16142), (11, 16175), (13, 16187), (15, 16202), (17, 16229), (18, 16238), (23, 16325), (24, 16334), (34, 16565), (37, 16652), (39, 16703), (40, 16739), (42, 16763), (44, 16811), (45, 16826), (49, 16925), (50, 16928), (55, 17009), (56, 17036), (58, 17051), (59, 17054), (61, 17078), (63, 17108), (64, 17129),

Gene: SchoolBus\_32 Start: 15092, Stop: 16321, Start Num: 1

Candidate Starts for SchoolBus\_32:

(Start: 1 @15092 has 23 MA's), (4, 15185), (5, 15188), (7, 15230), (8, 15329), (11, 15362), (13, 15374), (15, 15389), (17, 15416), (18, 15425), (23, 15512), (24, 15521), (34, 15752), (37, 15839), (39,

15890), (40, 15926), (42, 15950), (44, 15998), (45, 16013), (49, 16112), (50, 16115), (55, 16196), (56, 16223), (58, 16238), (59, 16241), (61, 16265), (63, 16295), (64, 16316),

Gene: Schuy\_30 Start: 15036, Stop: 16265, Start Num: 1

Candidate Starts for Schuy\_30:

(Start: 1 @15036 has 23 MA's), (4, 15129), (5, 15132), (7, 15174), (8, 15273), (11, 15306), (12, 15309), (13, 15318), (15, 15333), (17, 15360), (18, 15369), (23, 15456), (24, 15465), (34, 15696), (37, 15783), (39, 15834), (40, 15870), (42, 15894), (44, 15942), (49, 16056), (50, 16059), (55, 16140), (56, 16167), (58, 16182), (59, 16185), (61, 16209), (63, 16239), (64, 16260),

Gene: Shida\_32 Start: 14943, Stop: 16172, Start Num: 1

Candidate Starts for Shida\_32:

(Start: 1 @14943 has 23 MA's), (4, 15036), (5, 15039), (7, 15081), (8, 15180), (11, 15213), (12, 15216), (13, 15225), (15, 15240), (17, 15267), (18, 15276), (23, 15363), (24, 15372), (34, 15603), (37, 15690), (39, 15741), (40, 15777), (42, 15801), (44, 15849), (49, 15963), (50, 15966), (55, 16047), (56, 16074), (58, 16089), (59, 16092), (61, 16116), (63, 16146), (64, 16167),

Gene: Smooch\_34 Start: 16232, Stop: 17461, Start Num: 1

Candidate Starts for Smooch\_34:

(Start: 1 @16232 has 23 MA's), (4, 16325), (5, 16328), (7, 16370), (8, 16469), (11, 16502), (13, 16514), (15, 16529), (17, 16556), (18, 16565), (23, 16652), (24, 16661), (34, 16892), (37, 16979), (39, 17030), (40, 17066), (42, 17090), (44, 17138), (49, 17252), (50, 17255), (55, 17336), (56, 17363), (58, 17378), (59, 17381), (61, 17405), (63, 17435), (64, 17456),

Gene: TelAviv\_29 Start: 15086, Stop: 16315, Start Num: 1

Candidate Starts for TelAviv\_29:

(Start: 1 @15086 has 23 MA's), (4, 15179), (5, 15182), (7, 15224), (8, 15323), (11, 15356), (13, 15368), (15, 15383), (17, 15410), (18, 15419), (23, 15506), (24, 15515), (34, 15746), (37, 15833), (39, 15884), (40, 15920), (42, 15944), (44, 15992), (45, 16007), (49, 16106), (50, 16109), (55, 16190), (56, 16217), (58, 16232), (59, 16235), (61, 16259), (63, 16289), (64, 16310),

Gene: Vorrps\_31 Start: 14689, Stop: 15918, Start Num: 1

Candidate Starts for Vorrps\_31:

(Start: 1 @14689 has 23 MA's), (4, 14782), (5, 14785), (7, 14827), (8, 14926), (11, 14959), (13, 14971), (15, 14986), (17, 15013), (18, 15022), (23, 15109), (24, 15118), (34, 15349), (37, 15436), (39, 15487), (40, 15523), (42, 15547), (44, 15595), (49, 15709), (50, 15712), (55, 15793), (56, 15820), (58, 15835), (59, 15838), (61, 15862), (63, 15892), (64, 15913),

Gene: Wildflower\_30 Start: 14675, Stop: 15904, Start Num: 1

Candidate Starts for Wildflower\_30:

(Start: 1 @14675 has 23 MA's), (4, 14768), (5, 14771), (7, 14813), (8, 14912), (11, 14945), (13, 14957), (15, 14972), (17, 14999), (18, 15008), (23, 15095), (24, 15104), (34, 15335), (37, 15422), (39, 15473), (40, 15509), (42, 15533), (44, 15581), (49, 15695), (50, 15698), (53, 15740), (55, 15779), (56, 15806), (58, 15821), (59, 15824), (61, 15848), (63, 15878), (64, 15899),

Gene: Winget\_33 Start: 15358, Stop: 16587, Start Num: 1

Candidate Starts for Winget\_33:

(Start: 1 @15358 has 23 MA's), (4, 15451), (5, 15454), (7, 15496), (8, 15595), (11, 15628), (13, 15640), (15, 15655), (17, 15682), (18, 15691), (23, 15778), (24, 15787), (34, 16018), (37, 16105), (39, 16156), (40, 16192), (42, 16216), (44, 16264), (45, 16279), (49, 16378), (50, 16381), (55, 16462), (56, 16489), (58, 16504), (59, 16507), (61, 16531), (63, 16561), (64, 16582),

Gene: YungJamal\_35 Start: 15421, Stop: 16650, Start Num: 1

Candidate Starts for YungJamal\_35:

(Start: 1 @15421 has 23 MA's), (4, 15514), (5, 15517), (7, 15559), (8, 15658), (11, 15691), (13, 15703), (15, 15718), (17, 15745), (18, 15754), (23, 15841), (24, 15850), (34, 16081), (37, 16168), (39, 16219), (40, 16255), (42, 16279), (44, 16327), (45, 16342), (49, 16441), (50, 16444), (55, 16525), (56, 16552), (58, 16567), (59, 16570), (61, 16594), (63, 16624), (64, 16645),

Gene: Zakhe101\_32 Start: 14820, Stop: 16049, Start Num: 1

Candidate Starts for Zakhe101\_32:

(Start: 1 @14820 has 23 MA's), (4, 14913), (5, 14916), (7, 14958), (8, 15057), (11, 15090), (13, 15102), (15, 15117), (17, 15144), (18, 15153), (23, 15240), (24, 15249), (34, 15480), (37, 15567), (39, 15618), (40, 15654), (42, 15678), (44, 15726), (45, 15741), (49, 15840), (50, 15843), (55, 15924), (56, 15951), (58, 15966), (59, 15969), (61, 15993), (63, 16023), (64, 16044),