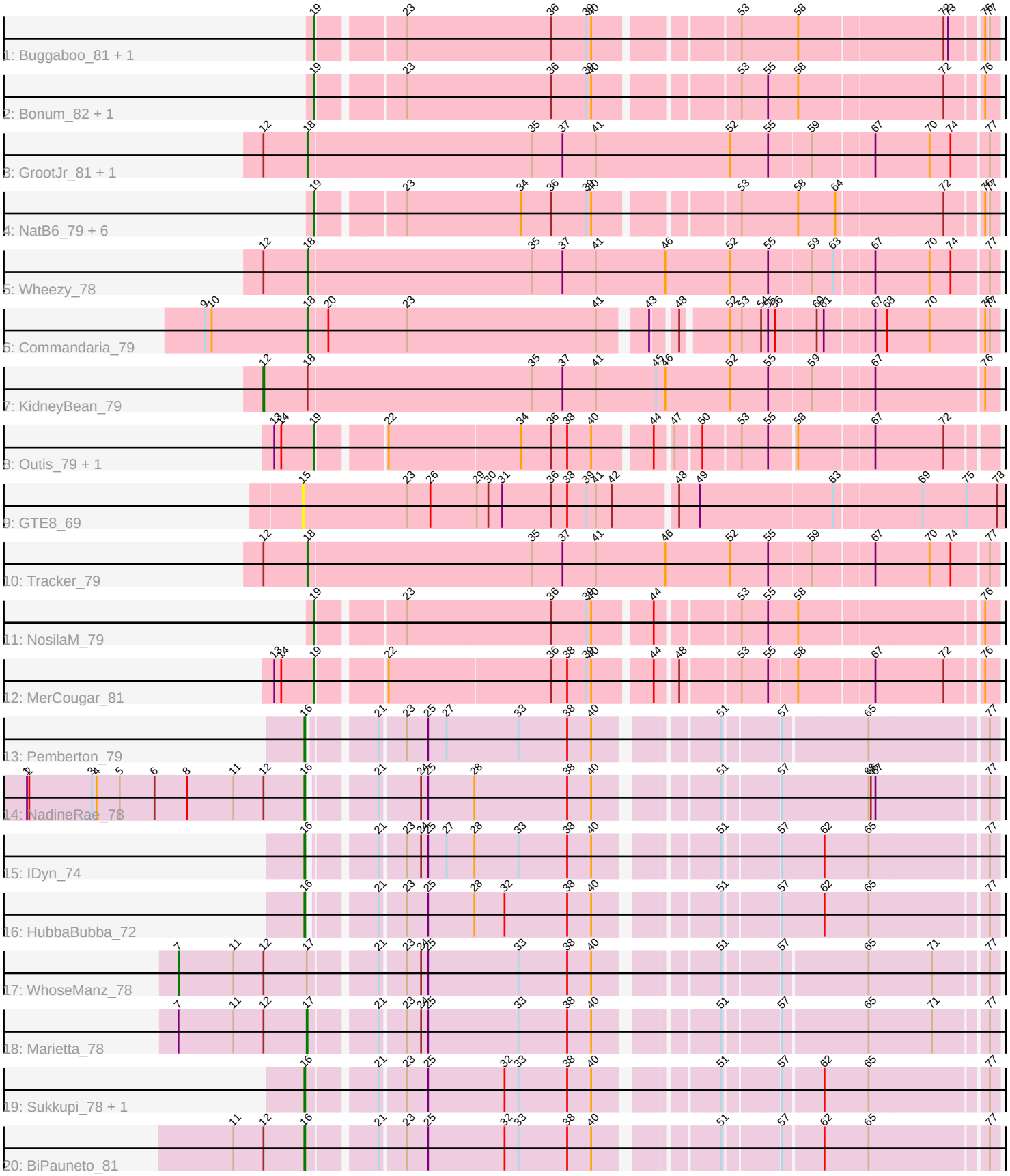
Pham 335111


1: Buggaboo_81 + 1
2: Bonum_82 + 1
3: GrootJr_81 + 1
4: NatB6_79 + 6
5: Wheezy_78
6: Commandaria_79
7: KidneyBean_79
8: Outis_79 + 1
9: GTE8_69
10: Tracker_79
11: NosilaM_79
12: MerCougar_81
13: Pemberton_79
14: NadineRae_78
15: IDyn_74
16: HubbaBubba_72
17: WhoseManz_78
18: Marietta_78
19: Sukkupi_78 + 1
20: BiPauneto_81

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 335111 Report

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

Pham number 335111 has 31 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Buggaboo_81, SuperSulley_81
• Track 2 : Bonum_82, Kabluna_83
• Track 3 : GrootJr_81, NovumRegina_79
• Track 4 : NatB6_79, Kurt_81, Jifall16_79, Emianna_81, Arti_77, Foxboro_79, Phomeo_78
• Track 5 : Wheezy_78
• Track 6 : Commandaria_79
• Track 7 : KidneyBean_79
• Track 8 : Outis_79, StarStruck_79
• Track 9 : GTE8_69
• Track 10 : Tracker_79
• Track 11 : NosilaM_79
• Track 12 : MerCougar_81
• Track 13 : Pemberton_79
• Track 14 : NadineRae_78
• Track 15 : IDyn_74
• Track 16 : HubbaBubba_72
• Track 17 : WhoseManz_78
• Track 18 : Marietta_78
• Track 19 : Sukkupi_78, Yndexa_78
• Track 20 : BiPauneto_81

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

The start number called the most often in the published annotations is 19, it was called in 15 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_77, Bonum_82, Buggaboo_81, Emianna_81, Foxboro_79, Jifall16_79, Kabluna_83, Kurt_81, MerCougar_81, NatB6_79, NosilaM_79, Outis_79, Phomeo_78, StarStruck_79, SuperSulley_81,

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

Genes that do not have the "Most Annotated" start:
• BiPauneto_81, Commandaria_79, GTE8_69, GrootJr_81, HubbaBubba_72, IDyn_74, KidneyBean_79, Marietta_78, NadineRae_78, NovumRegina_79, Pemberton_79, Sukkupi_78, Tracker_79, Wheezy_78, WhoseManz_78, Yndexa_78,

Summary by start number:

Start 7:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: WhoseManz_78 (CR4),

Start 12:
• Found in 9 of 31 (29.0%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 11.1% of time when present
• Phage (with cluster) where this start called: KidneyBean_79 (CR2),

Start 15:
• Found in 1 of 31 (3.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GTE8_69 (CR2),

Start 16:
• Found in 7 of 31 (22.6%) of genes in pham
• Manual Annotations of this start: 7 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_81 (CR4), HubbaBubba_72 (CR4), IDyn_74 (CR4), NadineRae_78 (CR4), Pemberton_79 (CR4), Sukkupi_78 (CR4), Yndexa_78 (CR4),

Start 17:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Marietta_78 (CR4),

Start 18:
• Found in 6 of 31 (19.4%) of genes in pham
• Manual Annotations of this start: 5 of 30
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Commandaria_79 (CR2), GrootJr_81 (CR2), NovumRegina_79 (CR2), Tracker_79 (CR2), Wheezy_78 (CR2),

Start 19:
• Found in 15 of 31 (48.4%) of genes in pham
• Manual Annotations of this start: 15 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_77 (CR2), Bonum_82 (CR2), Buggaboo_81 (CR2), Emianna_81 (CR2), Foxboro_79 (CR2), Jifall16_79 (CR2),

Kabluna_83 (CR2), Kurt_81 (CR2), MerCougar_81 (CR2), NatB6_79 (CR2), NosilaM_79 (CR2), Outis_79 (CR2), Phomeo_78 (CR2), StarStruck_79 (CR2), SuperSulley_81 (CR2),

Summary by clusters:

There are 2 clusters represented in this pham: CR2, CR4,

Info for manual annotations of cluster CR2:
•Start number 12 was manually annotated 1 time for cluster CR2.
•Start number 18 was manually annotated 5 times for cluster CR2.
•Start number 19 was manually annotated 15 times for cluster CR2.

Info for manual annotations of cluster CR4:
•Start number 7 was manually annotated 1 time for cluster CR4.
•Start number 16 was manually annotated 7 times for cluster CR4.
•Start number 17 was manually annotated 1 time for cluster CR4.

Gene Information:

Gene: Arti_77 Start: 58380, Stop: 59183, Start Num: 19
Candidate Starts for Arti_77:
(Start: 19 @58380 has 15 MA's), (23, 58479), (34, 58626), (36, 58665), (39, 58710), (40, 58716), (53, 58875), (58, 58947), (64, 58995), (72, 59127), (76, 59169), (77, 59172),

Gene: BiPauneto_81 Start: 57800, Stop: 58591, Start Num: 16
Candidate Starts for BiPauneto_81:
(11, 57710), (Start: 12 @57749 has 1 MA's), (Start: 16 @57800 has 7 MA's), (21, 57875), (23, 57905), (25, 57932), (32, 58031), (33, 58049), (38, 58112), (40, 58142), (51, 58268), (57, 58331), (62, 58379), (65, 58436), (77, 58580),

Gene: Bonum_82 Start: 59766, Stop: 60572, Start Num: 19
Candidate Starts for Bonum_82:
(Start: 19 @59766 has 15 MA's), (23, 59865), (36, 60051), (39, 60096), (40, 60102), (53, 60261), (55, 60294), (58, 60333), (72, 60513), (76, 60555),

Gene: Buggaboo_81 Start: 60304, Stop: 61107, Start Num: 19
Candidate Starts for Buggaboo_81:
(Start: 19 @60304 has 15 MA's), (23, 60403), (36, 60589), (39, 60634), (40, 60640), (53, 60799), (58, 60871), (72, 61051), (73, 61057), (76, 61093), (77, 61096),

Gene: Commandaria_79 Start: 59859, Stop: 60683, Start Num: 18
Candidate Starts for Commandaria_79:
(9, 59730), (10, 59739), (Start: 18 @59859 has 5 MA's), (20, 59883), (23, 59985), (41, 60228), (43, 60279), (48, 60306), (52, 60357), (53, 60372), (54, 60396), (55, 60405), (56, 60414), (60, 60462), (61, 60471), (67, 60531), (68, 60546), (70, 60600), (76, 60666), (77, 60672),

Gene: Emianna_81 Start: 60069, Stop: 60872, Start Num: 19
Candidate Starts for Emianna_81:
(Start: 19 @60069 has 15 MA's), (23, 60168), (34, 60315), (36, 60354), (39, 60399), (40, 60405), (53, 60564), (58, 60636), (64, 60684), (72, 60816), (76, 60858), (77, 60861),

Gene: Foxboro_79 Start: 59810, Stop: 60613, Start Num: 19
Candidate Starts for Foxboro_79:
(Start: 19 @59810 has 15 MA's), (23, 59909), (34, 60056), (36, 60095), (39, 60140), (40, 60146), (53, 60305), (58, 60377), (64, 60425), (72, 60557), (76, 60599), (77, 60602),

Gene: GTE8_69 Start: 53292, Stop: 54173, Start Num: 15
Candidate Starts for GTE8_69:
(15, 53292), (23, 53427), (26, 53457), (29, 53517), (30, 53532), (31, 53550), (36, 53613), (38, 53634), (39, 53658), (41, 53670), (42, 53691), (48, 53763), (49, 53790), (63, 53958), (69, 54066), (75, 54123), (78, 54162),

Gene: GrootJr_81 Start: 59002, Stop: 59871, Start Num: 18
Candidate Starts for GrootJr_81:
(Start: 12 @58948 has 1 MA's), (Start: 18 @59002 has 5 MA's), (35, 59290), (37, 59329), (41, 59371), (52, 59545), (55, 59593), (59, 59644), (67, 59719), (70, 59788), (74, 59815), (77, 59860),

Gene: HubbaBubba_72 Start: 54418, Stop: 55209, Start Num: 16
Candidate Starts for HubbaBubba_72:
(Start: 16 @54418 has 7 MA's), (21, 54487), (23, 54517), (25, 54544), (28, 54604), (32, 54643), (38, 54724), (40, 54754), (51, 54880), (57, 54943), (62, 54997), (65, 55054), (77, 55198),

Gene: IDyn_74 Start: 54800, Stop: 55591, Start Num: 16
Candidate Starts for IDyn_74:
(Start: 16 @54800 has 7 MA's), (21, 54869), (23, 54899), (24, 54917), (25, 54926), (27, 54950), (28, 54986), (33, 55043), (38, 55106), (40, 55136), (51, 55262), (57, 55325), (62, 55379), (65, 55436), (77, 55580),

Gene: Jifall16_79 Start: 59296, Stop: 60099, Start Num: 19
Candidate Starts for Jifall16_79:
(Start: 19 @59296 has 15 MA's), (23, 59395), (34, 59542), (36, 59581), (39, 59626), (40, 59632), (53, 59791), (58, 59863), (64, 59911), (72, 60043), (76, 60085), (77, 60088),

Gene: Kabluna_83 Start: 59116, Stop: 59922, Start Num: 19
Candidate Starts for Kabluna_83:
(Start: 19 @59116 has 15 MA's), (23, 59215), (36, 59401), (39, 59446), (40, 59452), (53, 59611), (55, 59644), (58, 59683), (72, 59863), (76, 59905),

Gene: KidneyBean_79 Start: 59377, Stop: 60300, Start Num: 12
Candidate Starts for KidneyBean_79:
(Start: 12 @59377 has 1 MA's), (Start: 18 @59431 has 5 MA's), (35, 59719), (37, 59758), (41, 59800), (45, 59878), (46, 59890), (52, 59974), (55, 60022), (59, 60073), (67, 60148), (76, 60283),

Gene: Kurt_81 Start: 60084, Stop: 60887, Start Num: 19
Candidate Starts for Kurt_81:
(Start: 19 @60084 has 15 MA's), (23, 60183), (34, 60330), (36, 60369), (39, 60414), (40, 60420), (53, 60579), (58, 60651), (64, 60699), (72, 60831), (76, 60873), (77, 60876),

Gene: Marietta_78 Start: 55699, Stop: 56490, Start Num: 17
Candidate Starts for Marietta_78:
(Start: 7 @55537 has 1 MA's), (11, 55606), (Start: 12 @55645 has 1 MA's), (Start: 17 @55699 has 1 MA's), (21, 55774), (23, 55804), (24, 55822), (25, 55831), (33, 55948), (38, 56011), (40, 56041), (51, 56167), (57, 56230), (65, 56335), (71, 56416), (77, 56479),

Gene: MerCougar_81 Start: 60746, Stop: 61546, Start Num: 19
Candidate Starts for MerCougar_81:
(13, 60695), (14, 60704), (Start: 19 @60746 has 15 MA's), (22, 60821), (36, 61028), (38, 61049), (39, 61073), (40, 61079), (44, 61145), (48, 61169), (53, 61238), (55, 61271), (58, 61307), (67, 61400), (72, 61487), (76, 61529),

Gene: NadineRae_78 Start: 55293, Stop: 56084, Start Num: 16
Candidate Starts for NadineRae_78:
(1, 54936), (2, 54939), (3, 55020), (4, 55026), (5, 55056), (6, 55101), (8, 55143), (11, 55203), (Start: 12 @55242 has 1 MA's), (Start: 16 @55293 has 7 MA's), (21, 55362), (24, 55410), (25, 55419), (28, 55479), (38, 55599), (40, 55629), (51, 55755), (57, 55818), (65, 55929), (66, 55932), (67, 55938), (77, 56073),

Gene: NatB6_79 Start: 58703, Stop: 59506, Start Num: 19
Candidate Starts for NatB6_79:
(Start: 19 @58703 has 15 MA's), (23, 58802), (34, 58949), (36, 58988), (39, 59033), (40, 59039), (53, 59198), (58, 59270), (64, 59318), (72, 59450), (76, 59492), (77, 59495),

Gene: NosilaM_79 Start: 59374, Stop: 60177, Start Num: 19
Candidate Starts for NosilaM_79:
(Start: 19 @59374 has 15 MA's), (23, 59473), (36, 59656), (39, 59701), (40, 59707), (44, 59773), (53, 59866), (55, 59899), (58, 59938), (76, 60160),

Gene: NovumRegina_79 Start: 59001, Stop: 59870, Start Num: 18
Candidate Starts for NovumRegina_79:
(Start: 12 @58947 has 1 MA's), (Start: 18 @59001 has 5 MA's), (35, 59289), (37, 59328), (41, 59370), (52, 59544), (55, 59592), (59, 59643), (67, 59718), (70, 59787), (74, 59814), (77, 59859),

Gene: Outis_79 Start: 59850, Stop: 60647, Start Num: 19
Candidate Starts for Outis_79:
(13, 59799), (14, 59808), (Start: 19 @59850 has 15 MA's), (22, 59925), (34, 60093), (36, 60132), (38, 60153), (40, 60183), (44, 60249), (47, 60267), (50, 60297), (53, 60342), (55, 60375), (58, 60408), (67, 60501), (72, 60588),

Gene: Pemberton_79 Start: 55865, Stop: 56653, Start Num: 16
Candidate Starts for Pemberton_79:
(Start: 16 @55865 has 7 MA's), (21, 55937), (23, 55967), (25, 55994), (27, 56018), (33, 56111), (38, 56174), (40, 56204), (51, 56330), (57, 56393), (65, 56498), (77, 56642),

Gene: Phomeo_78 Start: 59292, Stop: 60095, Start Num: 19
Candidate Starts for Phomeo_78:
(Start: 19 @59292 has 15 MA's), (23, 59391), (34, 59538), (36, 59577), (39, 59622), (40, 59628), (53, 59787), (58, 59859), (64, 59907), (72, 60039), (76, 60081), (77, 60084),

Gene: StarStruck_79 Start: 59850, Stop: 60647, Start Num: 19
Candidate Starts for StarStruck_79:
(13, 59799), (14, 59808), (Start: 19 @59850 has 15 MA's), (22, 59925), (34, 60093), (36, 60132), (38, 60153), (40, 60183), (44, 60249), (47, 60267), (50, 60297), (53, 60342), (55, 60375), (58, 60408), (67, 60501), (72, 60588),

Gene: Sukkupi_78 Start: 57341, Stop: 58132, Start Num: 16
Candidate Starts for Sukkupi_78:

(Start: 16 @57341 has 7 MA's), (21, 57416), (23, 57446), (25, 57473), (32, 57572), (33, 57590), (38, 57653), (40, 57683), (51, 57809), (57, 57872), (62, 57920), (65, 57977), (77, 58121),

Gene: SuperSulley_81 Start: 60304, Stop: 61107, Start Num: 19
Candidate Starts for SuperSulley_81:
(Start: 19 @60304 has 15 MA's), (23, 60403), (36, 60589), (39, 60634), (40, 60640), (53, 60799), (58, 60871), (72, 61051), (73, 61057), (76, 61093), (77, 61096),

Gene: Tracker_79 Start: 58448, Stop: 59317, Start Num: 18
Candidate Starts for Tracker_79:
(Start: 12 @58394 has 1 MA's), (Start: 18 @58448 has 5 MA's), (35, 58736), (37, 58775), (41, 58817), (46, 58907), (52, 58991), (55, 59039), (59, 59090), (67, 59165), (70, 59234), (74, 59261), (77, 59306),

Gene: Wheezy_78 Start: 58670, Stop: 59539, Start Num: 18
Candidate Starts for Wheezy_78:
(Start: 12 @58616 has 1 MA's), (Start: 18 @58670 has 5 MA's), (35, 58958), (37, 58997), (41, 59039), (46, 59129), (52, 59213), (55, 59261), (59, 59312), (63, 59339), (67, 59387), (70, 59456), (74, 59483), (77, 59528),

Gene: WhoseManz_78 Start: 55197, Stop: 56150, Start Num: 7
Candidate Starts for WhoseManz_78:
(Start: 7 @55197 has 1 MA's), (11, 55266), (Start: 12 @55305 has 1 MA's), (Start: 17 @55359 has 1 MA's), (21, 55434), (23, 55464), (24, 55482), (25, 55491), (33, 55608), (38, 55671), (40, 55701), (51, 55827), (57, 55890), (65, 55995), (71, 56076), (77, 56139),

Gene: Yndexa_78 Start: 57341, Stop: 58132, Start Num: 16
Candidate Starts for Yndexa_78:
(Start: 16 @57341 has 7 MA's), (21, 57416), (23, 57446), (25, 57473), (32, 57572), (33, 57590), (38, 57653), (40, 57683), (51, 57809), (57, 57872), (62, 57920), (65, 57977), (77, 58121),