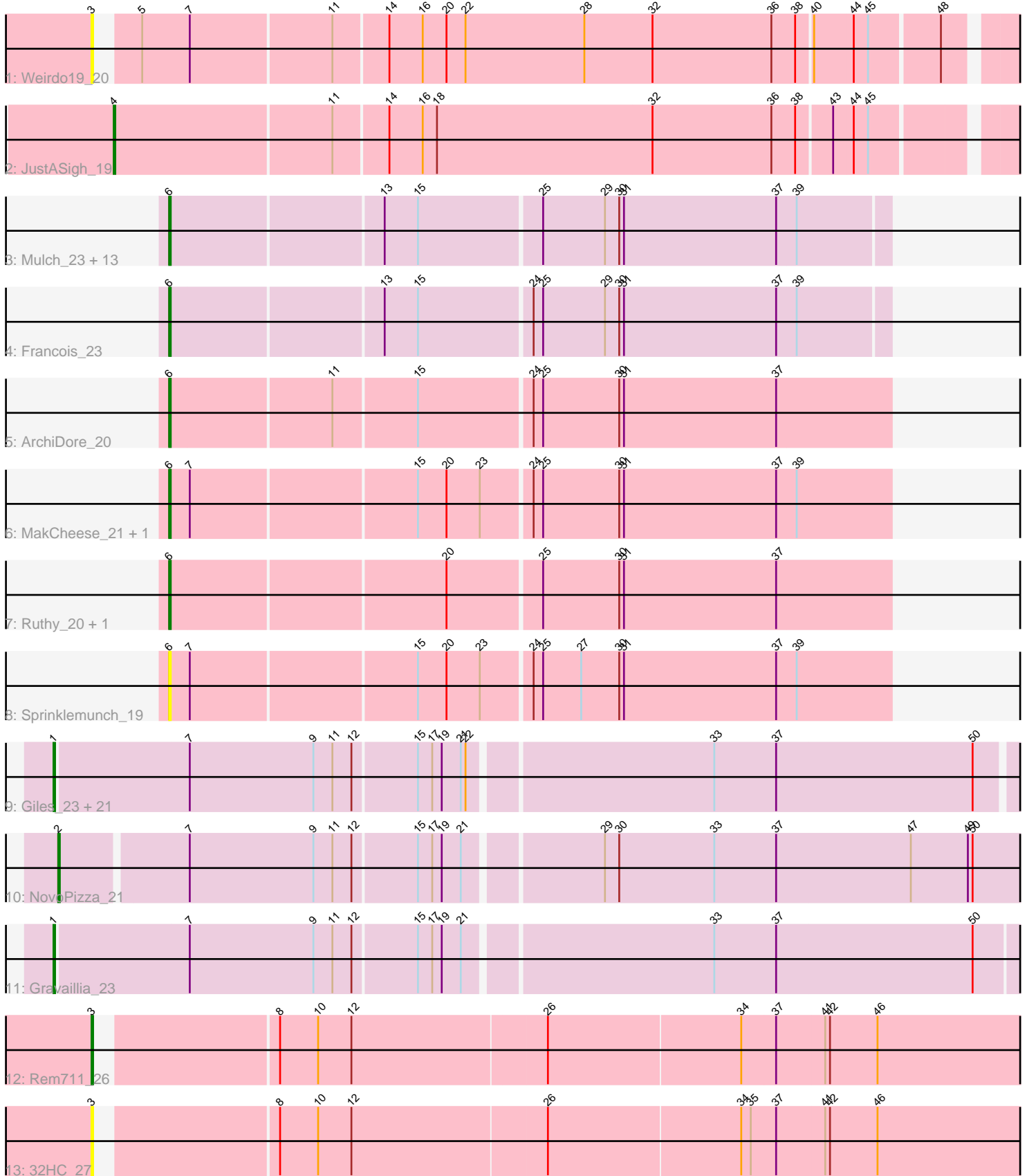


Pham 308765



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 308765 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308765 has 49 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Weirdo19\_20
- Track 2 : JustASigh\_19
- Track 3 : Mulch\_23, NancyRae\_23, Ayotoya\_23, DelRio\_24, GrandSlam\_23, Brylie\_23, Nadeem\_23, WheatThin\_23, Chop\_23, Bock\_23, Parada\_23, Pimento\_24, BetterKatz\_23, Hamood\_23
- Track 4 : Francois\_23
- Track 5 : ArchiDore\_20
- Track 6 : MakCheese\_21, Zodiariah\_19
- Track 7 : Ruthy\_20, DumpsterDude\_20
- Track 8 : Sprinklemunch\_19
- Track 9 : Giles\_23, HH92\_23, Wishmaker\_23, Dewey\_23, Forge\_23, Luke\_23, Daegal\_24, Amochick\_23, Ubuntu\_23, Luna22\_23, Hail\_23, Kinbote\_23, BloominB\_23, Evanesce\_23, Hadrien\_23, Gancho\_22, Webster2\_23, DeepSoil15\_23, LilHazelnut\_23, Amymech\_23, OBUpride\_23, Ein37\_23
- Track 10 : NovoPizza\_21
- Track 11 : Gravallia\_23
- Track 12 : Rem711\_26
- Track 13 : 32HC\_27

### ***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 22 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amochick\_23, Amymech\_23, BloominB\_23, Daegal\_24, DeepSoil15\_23, Dewey\_23, Ein37\_23, Evanesce\_23, Forge\_23, Gancho\_22, Giles\_23, Gravallia\_23, HH92\_23, Hadrien\_23, Hail\_23, Kinbote\_23, LilHazelnut\_23, Luke\_23, Luna22\_23, OBUpride\_23, Ubuntu\_23, Webster2\_23, Wishmaker\_23,

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

- 

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

- 32HC\_27, ArchiDore\_20, Ayotoya\_23, BetterKatz\_23, Bock\_23, Brylie\_23, Chop\_23, DelRio\_24, DumpsterDude\_20, Francois\_23, GrandSlam\_23, Hamood\_23, JustASigh\_19, MakCheese\_21, Mulch\_23, Nadeem\_23, NancyRae\_23, NovoPizza\_21, Parada\_23, Pimento\_24, Rem711\_26, Ruthy\_20, Sprinklemunch\_19, Weirido19\_20, WheatThin\_23, Zodiariah\_19,

### Summary by start number:

#### Start 1:

- Found in 23 of 49 ( 46.9% ) of genes in pham
- Manual Annotations of this start: 22 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amochick\_23 (Q), Amymech\_23 (Q), BloominB\_23 (Q), Daegal\_24 (Q), DeepSoil15\_23 (Q), Dewey\_23 (Q), Ein37\_23 (Q), Evanesce\_23 (Q), Forge\_23 (Q), Gancho\_22 (Q), Giles\_23 (Q), Gravaillia\_23 (Q), HH92\_23 (Q), Hadrien\_23 (Q), Hail\_23 (Q), Kinbote\_23 (Q), LilHazelNut\_23 (Q), Luke\_23 (Q), Luna22\_23 (Q), OBUpride\_23 (Q), Ubuntu\_23 (Q), Webster2\_23 (Q), Wishmaker\_23 (Q),

#### Start 2:

- Found in 1 of 49 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NovoPizza\_21 (Q),

#### Start 3:

- Found in 3 of 49 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 32HC\_27 (Z), Rem711\_26 (Z), Weirido19\_20 (AH),

#### Start 4:

- Found in 1 of 49 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JustASigh\_19 (AH),

#### Start 6:

- Found in 21 of 49 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 19 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArchiDore\_20 (DW), Ayotoya\_23 (DI), BetterKatz\_23 (DI), Bock\_23 (DI), Brylie\_23 (DI), Chop\_23 (DI), DelRio\_24 (DI), DumpsterDude\_20 (DW), Francois\_23 (DI), GrandSlam\_23 (DI), Hamood\_23 (DI), MakCheese\_21 (DW), Mulch\_23 (DI), Nadeem\_23 (DI), NancyRae\_23 (DI), Parada\_23 (DI), Pimento\_24 (DI), Ruthy\_20 (DW), Sprinklemunch\_19 (DW), WheatThin\_23 (DI), Zodiariah\_19 (DW),

### Summary by clusters:

There are 5 clusters represented in this pham: Q, AH, Z, DW, DI,

Info for manual annotations of cluster AH:

- Start number 4 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster DI:

- Start number 6 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DW:

- Start number 6 was manually annotated 4 times for cluster DW.

Info for manual annotations of cluster Q:

- Start number 1 was manually annotated 22 times for cluster Q.
- Start number 2 was manually annotated 1 time for cluster Q.

Info for manual annotations of cluster Z:

- Start number 3 was manually annotated 1 time for cluster Z.

### ***Gene Information:***

Gene: 32HC\_27 Start: 20718, Stop: 21302, Start Num: 3

Candidate Starts for 32HC\_27:

(Start: 3 @20718 has 1 MA's), (8, 20820), (10, 20844), (12, 20865), (26, 20985), (34, 21105), (35, 21111), (37, 21126), (41, 21156), (42, 21159), (46, 21189),

Gene: Amochick\_23 Start: 19151, Stop: 19759, Start Num: 1

Candidate Starts for Amochick\_23:

(Start: 1 @19151 has 22 MA's), (7, 19232), (9, 19310), (11, 19322), (12, 19334), (15, 19373), (17, 19382), (19, 19388), (21, 19400), (22, 19403), (33, 19550), (37, 19589), (50, 19712),

Gene: Amymech\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Amymech\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: ArchiDore\_20 Start: 17953, Stop: 18396, Start Num: 6

Candidate Starts for ArchiDore\_20:

(Start: 6 @17953 has 19 MA's), (11, 18052), (15, 18103), (24, 18172), (25, 18178), (30, 18226), (31, 18229), (37, 18325),

Gene: Ayotoya\_23 Start: 19851, Stop: 20291, Start Num: 6

Candidate Starts for Ayotoya\_23:

(Start: 6 @19851 has 19 MA's), (13, 19980), (15, 20001), (25, 20076), (29, 20115), (30, 20124), (31, 20127), (37, 20223), (39, 20235),

Gene: BetterKatz\_23 Start: 19324, Stop: 19764, Start Num: 6

Candidate Starts for BetterKatz\_23:

(Start: 6 @19324 has 19 MA's), (13, 19453), (15, 19474), (25, 19549), (29, 19588), (30, 19597), (31, 19600), (37, 19696), (39, 19708),

Gene: BloominB\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for BloominB\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Bock\_23 Start: 19074, Stop: 19514, Start Num: 6

Candidate Starts for Bock\_23:

(Start: 6 @19074 has 19 MA's), (13, 19203), (15, 19224), (25, 19299), (29, 19338), (30, 19347), (31, 19350), (37, 19446), (39, 19458),

Gene: Brylie\_23 Start: 19065, Stop: 19505, Start Num: 6

Candidate Starts for Brylie\_23:

(Start: 6 @19065 has 19 MA's), (13, 19194), (15, 19215), (25, 19290), (29, 19329), (30, 19338), (31, 19341), (37, 19437), (39, 19449),

Gene: Chop\_23 Start: 19599, Stop: 20039, Start Num: 6

Candidate Starts for Chop\_23:

(Start: 6 @19599 has 19 MA's), (13, 19728), (15, 19749), (25, 19824), (29, 19863), (30, 19872), (31, 19875), (37, 19971), (39, 19983),

Gene: Daegal\_24 Start: 19439, Stop: 20047, Start Num: 1

Candidate Starts for Daegal\_24:

(Start: 1 @19439 has 22 MA's), (7, 19520), (9, 19598), (11, 19610), (12, 19622), (15, 19661), (17, 19670), (19, 19676), (21, 19688), (22, 19691), (33, 19838), (37, 19877), (50, 20000),

Gene: DeepSoil15\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for DeepSoil15\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: DelRio\_24 Start: 20073, Stop: 20513, Start Num: 6

Candidate Starts for DelRio\_24:

(Start: 6 @20073 has 19 MA's), (13, 20202), (15, 20223), (25, 20298), (29, 20337), (30, 20346), (31, 20349), (37, 20445), (39, 20457),

Gene: Dewey\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Dewey\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: DumpsterDude\_20 Start: 17926, Stop: 18369, Start Num: 6

Candidate Starts for DumpsterDude\_20:

(Start: 6 @17926 has 19 MA's), (20, 18094), (25, 18151), (30, 18199), (31, 18202), (37, 18298),

Gene: Ein37\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Ein37\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Evanesce\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Evanesce\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Forge\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Forge\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Francois\_23 Start: 19088, Stop: 19528, Start Num: 6

Candidate Starts for Francois\_23:

(Start: 6 @19088 has 19 MA's), (13, 19217), (15, 19238), (24, 19307), (25, 19313), (29, 19352), (30, 19361), (31, 19364), (37, 19460), (39, 19472),

Gene: Gancho\_22 Start: 18869, Stop: 19477, Start Num: 1

Candidate Starts for Gancho\_22:

(Start: 1 @18869 has 22 MA's), (7, 18950), (9, 19028), (11, 19040), (12, 19052), (15, 19091), (17, 19100), (19, 19106), (21, 19118), (22, 19121), (33, 19268), (37, 19307), (50, 19430),

Gene: Giles\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Giles\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: GrandSlam\_23 Start: 19599, Stop: 20039, Start Num: 6

Candidate Starts for GrandSlam\_23:

(Start: 6 @19599 has 19 MA's), (13, 19728), (15, 19749), (25, 19824), (29, 19863), (30, 19872), (31, 19875), (37, 19971), (39, 19983),

Gene: Gravaillia\_23 Start: 18875, Stop: 19483, Start Num: 1

Candidate Starts for Gravaillia\_23:

(Start: 1 @18875 has 22 MA's), (7, 18956), (9, 19034), (11, 19046), (12, 19058), (15, 19097), (17, 19106), (19, 19112), (21, 19124), (33, 19274), (37, 19313), (50, 19436),

Gene: HH92\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for HH92\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Hadrien\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Hadrien\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Hail\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Hail\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Hamood\_23 Start: 19599, Stop: 20039, Start Num: 6

Candidate Starts for Hamood\_23:

(Start: 6 @19599 has 19 MA's), (13, 19728), (15, 19749), (25, 19824), (29, 19863), (30, 19872), (31, 19875), (37, 19971), (39, 19983),

Gene: JustASigh\_19 Start: 18112, Stop: 18678, Start Num: 4

Candidate Starts for JustASigh\_19:

(Start: 4 @18112 has 1 MA's), (11, 18247), (14, 18280), (16, 18301), (18, 18310), (32, 18445), (36, 18520), (38, 18535), (43, 18556), (44, 18568), (45, 18577),

Gene: Kinbote\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Kinbote\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: LilHazelnut\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for LilHazelnut\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Luke\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Luke\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Luna22\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Luna22\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: MakCheese\_21 Start: 17773, Stop: 18216, Start Num: 6

Candidate Starts for MakCheese\_21:

(Start: 6 @17773 has 19 MA's), (7, 17785), (15, 17923), (20, 17941), (23, 17962), (24, 17992), (25, 17998), (30, 18046), (31, 18049), (37, 18145), (39, 18157),

Gene: Mulch\_23 Start: 19065, Stop: 19505, Start Num: 6

Candidate Starts for Mulch\_23:

(Start: 6 @19065 has 19 MA's), (13, 19194), (15, 19215), (25, 19290), (29, 19329), (30, 19338), (31, 19341), (37, 19437), (39, 19449),

Gene: Nadeem\_23 Start: 19065, Stop: 19505, Start Num: 6

Candidate Starts for Nadeem\_23:

(Start: 6 @19065 has 19 MA's), (13, 19194), (15, 19215), (25, 19290), (29, 19329), (30, 19338), (31, 19341), (37, 19437), (39, 19449),

Gene: NancyRae\_23 Start: 19071, Stop: 19511, Start Num: 6

Candidate Starts for NancyRae\_23:

(Start: 6 @19071 has 19 MA's), (13, 19200), (15, 19221), (25, 19296), (29, 19335), (30, 19344), (31, 19347), (37, 19443), (39, 19455),

Gene: NovoPizza\_21 Start: 20122, Stop: 20730, Start Num: 2

Candidate Starts for NovoPizza\_21:

(Start: 2 @20122 has 1 MA's), (7, 20197), (9, 20275), (11, 20287), (12, 20299), (15, 20338), (17, 20347), (19, 20353), (21, 20365), (29, 20446), (30, 20455), (33, 20515), (37, 20554), (47, 20638), (49, 20674), (50, 20677),

Gene: OBUpride\_23 Start: 19142, Stop: 19747, Start Num: 1

Candidate Starts for OBUpride\_23:

(Start: 1 @19142 has 22 MA's), (7, 19223), (9, 19301), (11, 19313), (12, 19325), (15, 19364), (17, 19373), (19, 19379), (21, 19391), (22, 19394), (33, 19541), (37, 19580), (50, 19703),

Gene: Parada\_23 Start: 19065, Stop: 19505, Start Num: 6

Candidate Starts for Parada\_23:

(Start: 6 @19065 has 19 MA's), (13, 19194), (15, 19215), (25, 19290), (29, 19329), (30, 19338), (31, 19341), (37, 19437), (39, 19449),

Gene: Pimento\_24 Start: 18762, Stop: 19202, Start Num: 6

Candidate Starts for Pimento\_24:

(Start: 6 @18762 has 19 MA's), (13, 18891), (15, 18912), (25, 18987), (29, 19026), (30, 19035), (31, 19038), (37, 19134), (39, 19146),

Gene: Rem711\_26 Start: 20768, Stop: 21352, Start Num: 3

Candidate Starts for Rem711\_26:

(Start: 3 @20768 has 1 MA's), (8, 20870), (10, 20894), (12, 20915), (26, 21035), (34, 21155), (37, 21176), (41, 21206), (42, 21209), (46, 21239),

Gene: Ruthy\_20 Start: 18039, Stop: 18482, Start Num: 6

Candidate Starts for Ruthy\_20:

(Start: 6 @18039 has 19 MA's), (20, 18207), (25, 18264), (30, 18312), (31, 18315), (37, 18411),

Gene: Sprinklemunch\_19 Start: 17803, Stop: 18246, Start Num: 6

Candidate Starts for Sprinklemunch\_19:

(Start: 6 @17803 has 19 MA's), (7, 17815), (15, 17953), (20, 17971), (23, 17992), (24, 18022), (25, 18028), (27, 18052), (30, 18076), (31, 18079), (37, 18175), (39, 18187),

Gene: Ubuntu\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Ubuntu\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Webster2\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Webster2\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Weirido19\_20 Start: 17819, Stop: 18382, Start Num: 3

Candidate Starts for Weirido19\_20:

(Start: 3 @17819 has 1 MA's), (5, 17837), (7, 17867), (11, 17954), (14, 17987), (16, 18008), (20, 18023), (22, 18035), (28, 18110), (32, 18152), (36, 18227), (38, 18242), (40, 18251), (44, 18275), (45, 18284), (48, 18326),

Gene: WheatThin\_23 Start: 19065, Stop: 19505, Start Num: 6

Candidate Starts for WheatThin\_23:

(Start: 6 @19065 has 19 MA's), (13, 19194), (15, 19215), (25, 19290), (29, 19329), (30, 19338), (31, 19341), (37, 19437), (39, 19449),

Gene: Wishmaker\_23 Start: 19148, Stop: 19753, Start Num: 1

Candidate Starts for Wishmaker\_23:

(Start: 1 @19148 has 22 MA's), (7, 19229), (9, 19307), (11, 19319), (12, 19331), (15, 19370), (17, 19379), (19, 19385), (21, 19397), (22, 19400), (33, 19547), (37, 19586), (50, 19709),

Gene: Zodiariah\_19 Start: 17879, Stop: 18322, Start Num: 6

Candidate Starts for Zodiariah\_19:

(Start: 6 @17879 has 19 MA's), (7, 17891), (15, 18029), (20, 18047), (23, 18068), (24, 18098), (25, 18104), (30, 18152), (31, 18155), (37, 18251), (39, 18263),

