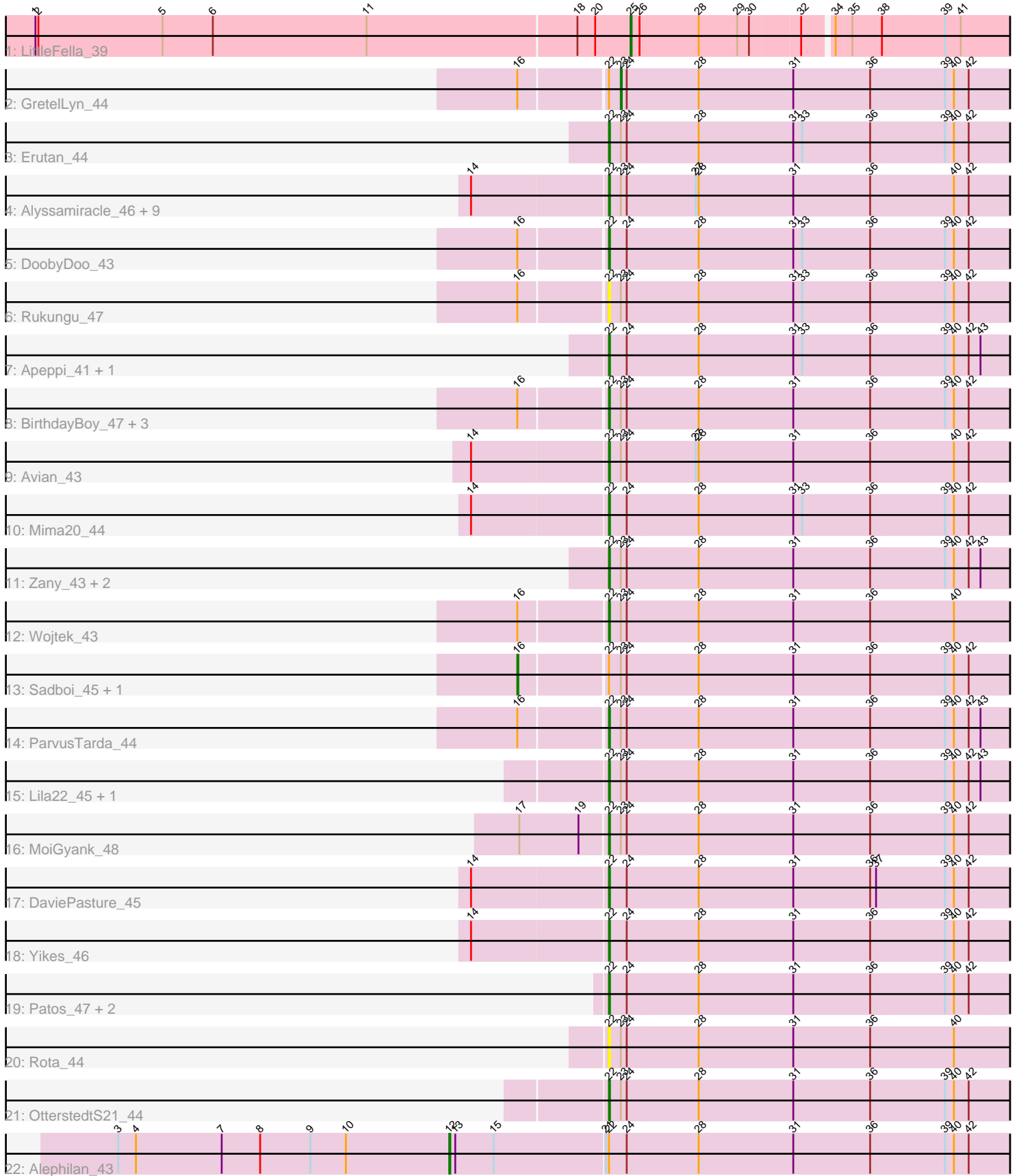


# Pham 308863



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 308863 Report

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

Pham number 308863 has 41 members, 5 are drafts.

Phages represented in each track:

- Track 1 : LittleFella\_39
- Track 2 : GretelLyn\_44
- Track 3 : Erutan\_44
- Track 4 : Alyssamiracle\_46, Stormer\_46, Riduram\_43, Jamemuya19\_43, Charminar\_43, Genamy16\_46, Rumi\_45, NovaSharks\_45, RazorC\_44, Astralis\_43
- Track 5 : DoobyDoo\_43
- Track 6 : Rukungu\_47
- Track 7 : Apeppi\_41, LuckyLeo\_43
- Track 8 : BirthdayBoy\_47, Pywacket\_43, Sampudon\_45, Jalebi\_44
- Track 9 : Avian\_43
- Track 10 : Mima20\_44
- Track 11 : Zany\_43, GOATification\_45, Fulcrum\_45
- Track 12 : Wojtek\_43
- Track 13 : Sadboi\_45, Ranch\_46
- Track 14 : ParvusTarda\_44
- Track 15 : Lila22\_45, Lambo\_44
- Track 16 : MoiGyank\_48
- Track 17 : DaviePasture\_45
- Track 18 : Yikes\_46
- Track 19 : Patos\_47, NorManre\_47, LavAbarElk\_44
- Track 20 : Rota\_44
- Track 21 : OtterstedtS21\_44
- Track 22 : Alephilan\_43

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

The start number called the most often in the published annotations is 22, it was called in 31 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alyssamiracle\_46, Apeppi\_41, Astralis\_43, Avian\_43, BirthdayBoy\_47, Charminar\_43, DaviePasture\_45, DoobyDoo\_43, Erutan\_44, Fulcrum\_45, GOATification\_45, Genamy16\_46, Jalebi\_44, Jamemuya19\_43, Lambo\_44, LavAbarElk\_44, Lila22\_45, LuckyLeo\_43, Mima20\_44, MoiGyank\_48, NorManre\_47,

NovaSharks\_45, OtterstedtS21\_44, ParvusTarda\_44, Patos\_47, Pywacket\_43, RazorC\_44, Riduram\_43, Rota\_44, Rukungu\_47, Rumi\_45, Sampudon\_45, Stormer\_46, Wojtek\_43, Yikes\_46, Zany\_43,

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

- Alephilan\_43, Gretellyn\_44, Ranch\_46, Sadboi\_45,

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

- LittleFella\_39,

### Summary by start number:

Start 12:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephilan\_43 (DV),

Start 16:

- Found in 11 of 41 ( 26.8% ) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Ranch\_46 (DV), Sadboi\_45 (DV),

Start 22:

- Found in 40 of 41 ( 97.6% ) of genes in pham
- Manual Annotations of this start: 31 of 36
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Alyssamiracle\_46 (DV), Apeppi\_41 (DV), Astralis\_43 (DV), Avian\_43 (DV), BirthdayBoy\_47 (DV), Charminar\_43 (DV), DaviePasture\_45 (DV), DoobyDoo\_43 (DV), Erutan\_44 (DV), Fulcrum\_45 (DV), GOATification\_45 (DV), Genamy16\_46 (DV), Jalebi\_44 (DV), Jamemuya19\_43 (DV), Lambo\_44 (DV), LavAbarElk\_44 (DV), Lila22\_45 (DV), LuckyLeo\_43 (DV), Mima20\_44 (DV), MoiGyank\_48 (DV), NorManre\_47 (DV), NovaSharks\_45 (DV), OtterstedtS21\_44 (DV), ParvusTarda\_44 (DV), Patos\_47 (DV), Pywacket\_43 (DV), RazorC\_44 (DV), Riduram\_43 (DV), Rota\_44 (DV), Rukungu\_47 (DV), Rumi\_45 (DV), Sampudon\_45 (DV), Stormer\_46 (DV), Wojtek\_43 (DV), Yikes\_46 (DV), Zany\_43 (DV),

Start 23:

- Found in 30 of 41 ( 73.2% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Gretellyn\_44 (DV),

Start 25:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleFella\_39 (DG2),

### Summary by clusters:

There are 2 clusters represented in this pham: DV, DG2,

Info for manual annotations of cluster DG2:

- Start number 25 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:

- Start number 12 was manually annotated 1 time for cluster DV.
- Start number 16 was manually annotated 2 times for cluster DV.
- Start number 22 was manually annotated 31 times for cluster DV.
- Start number 23 was manually annotated 1 time for cluster DV.

### **Gene Information:**

Gene: Alephilan\_43 Start: 34914, Stop: 35510, Start Num: 12

Candidate Starts for Alephilan\_43:

(3, 34578), (4, 34596), (7, 34683), (8, 34722), (9, 34773), (10, 34809), (Start: 12 @34914 has 1 MA's), (13, 34920), (15, 34959), (21, 35070), (Start: 22 @35073 has 31 MA's), (24, 35091), (28, 35163), (31, 35259), (36, 35337), (39, 35412), (40, 35421), (42, 35436),

Gene: Alyssamiracle\_46 Start: 34006, Stop: 34443, Start Num: 22

Candidate Starts for Alyssamiracle\_46:

(14, 33871), (Start: 22 @34006 has 31 MA's), (Start: 23 @34018 has 1 MA's), (24, 34024), (27, 34093), (28, 34096), (31, 34192), (36, 34270), (40, 34354), (42, 34369),

Gene: Apeppi\_41 Start: 34575, Stop: 35012, Start Num: 22

Candidate Starts for Apeppi\_41:

(Start: 22 @34575 has 31 MA's), (24, 34593), (28, 34665), (31, 34761), (33, 34770), (36, 34839), (39, 34914), (40, 34923), (42, 34938), (43, 34950),

Gene: Astralis\_43 Start: 33584, Stop: 34021, Start Num: 22

Candidate Starts for Astralis\_43:

(14, 33449), (Start: 22 @33584 has 31 MA's), (Start: 23 @33596 has 1 MA's), (24, 33602), (27, 33671), (28, 33674), (31, 33770), (36, 33848), (40, 33932), (42, 33947),

Gene: Avian\_43 Start: 33973, Stop: 34410, Start Num: 22

Candidate Starts for Avian\_43:

(14, 33838), (Start: 22 @33973 has 31 MA's), (Start: 23 @33985 has 1 MA's), (24, 33991), (27, 34060), (28, 34063), (31, 34159), (36, 34237), (40, 34321), (42, 34336),

Gene: BirthdayBoy\_47 Start: 35622, Stop: 36059, Start Num: 22

Candidate Starts for BirthdayBoy\_47:

(Start: 16 @35538 has 2 MA's), (Start: 22 @35622 has 31 MA's), (Start: 23 @35634 has 1 MA's), (24, 35640), (28, 35712), (31, 35808), (36, 35886), (39, 35961), (40, 35970), (42, 35985),

Gene: Charminar\_43 Start: 33591, Stop: 34028, Start Num: 22

Candidate Starts for Charminar\_43:

(14, 33456), (Start: 22 @33591 has 31 MA's), (Start: 23 @33603 has 1 MA's), (24, 33609), (27, 33678), (28, 33681), (31, 33777), (36, 33855), (40, 33939), (42, 33954),

Gene: DaviePasture\_45 Start: 35417, Stop: 35854, Start Num: 22

Candidate Starts for DaviePasture\_45:

(14, 35282), (Start: 22 @35417 has 31 MA's), (24, 35435), (28, 35507), (31, 35603), (36, 35681), (37, 35687), (39, 35756), (40, 35765), (42, 35780),

Gene: DoobyDoo\_43 Start: 34236, Stop: 34673, Start Num: 22

Candidate Starts for DoobyDoo\_43:

(Start: 16 @34152 has 2 MA's), (Start: 22 @34236 has 31 MA's), (24, 34254), (28, 34326), (31, 34422), (33, 34431), (36, 34500), (39, 34575), (40, 34584), (42, 34599),

Gene: Erutan\_44 Start: 34646, Stop: 35083, Start Num: 22

Candidate Starts for Erutan\_44:

(Start: 22 @34646 has 31 MA's), (Start: 23 @34658 has 1 MA's), (24, 34664), (28, 34736), (31, 34832), (33, 34841), (36, 34910), (39, 34985), (40, 34994), (42, 35009),

Gene: Fulcrum\_45 Start: 34917, Stop: 35354, Start Num: 22

Candidate Starts for Fulcrum\_45:

(Start: 22 @34917 has 31 MA's), (Start: 23 @34929 has 1 MA's), (24, 34935), (28, 35007), (31, 35103), (36, 35181), (39, 35256), (40, 35265), (42, 35280), (43, 35292),

Gene: GOATification\_45 Start: 34917, Stop: 35354, Start Num: 22

Candidate Starts for GOATification\_45:

(Start: 22 @34917 has 31 MA's), (Start: 23 @34929 has 1 MA's), (24, 34935), (28, 35007), (31, 35103), (36, 35181), (39, 35256), (40, 35265), (42, 35280), (43, 35292),

Gene: Genamy16\_46 Start: 33994, Stop: 34431, Start Num: 22

Candidate Starts for Genamy16\_46:

(14, 33859), (Start: 22 @33994 has 31 MA's), (Start: 23 @34006 has 1 MA's), (24, 34012), (27, 34081), (28, 34084), (31, 34180), (36, 34258), (40, 34342), (42, 34357),

Gene: Gretellyn\_44 Start: 35659, Stop: 36084, Start Num: 23

Candidate Starts for Gretellyn\_44:

(Start: 16 @35563 has 2 MA's), (Start: 22 @35647 has 31 MA's), (Start: 23 @35659 has 1 MA's), (24, 35665), (28, 35737), (31, 35833), (36, 35911), (39, 35986), (40, 35995), (42, 36010),

Gene: Jalebi\_44 Start: 36153, Stop: 36590, Start Num: 22

Candidate Starts for Jalebi\_44:

(Start: 16 @36069 has 2 MA's), (Start: 22 @36153 has 31 MA's), (Start: 23 @36165 has 1 MA's), (24, 36171), (28, 36243), (31, 36339), (36, 36417), (39, 36492), (40, 36501), (42, 36516),

Gene: Jamemuya19\_43 Start: 33597, Stop: 34034, Start Num: 22

Candidate Starts for Jamemuya19\_43:

(14, 33462), (Start: 22 @33597 has 31 MA's), (Start: 23 @33609 has 1 MA's), (24, 33615), (27, 33684), (28, 33687), (31, 33783), (36, 33861), (40, 33945), (42, 33960),

Gene: Lambo\_44 Start: 35015, Stop: 35452, Start Num: 22

Candidate Starts for Lambo\_44:

(Start: 22 @35015 has 31 MA's), (Start: 23 @35027 has 1 MA's), (24, 35033), (28, 35105), (31, 35201), (36, 35279), (39, 35354), (40, 35363), (42, 35378), (43, 35390),

Gene: LavAbarElk\_44 Start: 34294, Stop: 34731, Start Num: 22

Candidate Starts for LavAbarElk\_44:

(Start: 22 @34294 has 31 MA's), (24, 34312), (28, 34384), (31, 34480), (36, 34558), (39, 34633), (40, 34642), (42, 34657),

Gene: Lila22\_45 Start: 35599, Stop: 36036, Start Num: 22

Candidate Starts for Lila22\_45:

(Start: 22 @35599 has 31 MA's), (Start: 23 @35611 has 1 MA's), (24, 35617), (28, 35689), (31, 35785), (36, 35863), (39, 35938), (40, 35947), (42, 35962), (43, 35974),

Gene: LittleFella\_39 Start: 32425, Stop: 32823, Start Num: 25

Candidate Starts for LittleFella\_39:

(1, 31825), (2, 31828), (5, 31954), (6, 32005), (11, 32161), (18, 32371), (20, 32389), (Start: 25 @32425 has 1 MA's), (26, 32434), (28, 32494), (29, 32533), (30, 32545), (32, 32593), (34, 32620), (35, 32635), (38, 32665), (39, 32728), (41, 32743),

Gene: LuckyLeo\_43 Start: 34575, Stop: 35012, Start Num: 22

Candidate Starts for LuckyLeo\_43:

(Start: 22 @34575 has 31 MA's), (24, 34593), (28, 34665), (31, 34761), (33, 34770), (36, 34839), (39, 34914), (40, 34923), (42, 34938), (43, 34950),

Gene: Mima20\_44 Start: 35316, Stop: 35753, Start Num: 22

Candidate Starts for Mima20\_44:

(14, 35181), (Start: 22 @35316 has 31 MA's), (24, 35334), (28, 35406), (31, 35502), (33, 35511), (36, 35580), (39, 35655), (40, 35664), (42, 35679),

Gene: MoiGyank\_48 Start: 36213, Stop: 36650, Start Num: 22

Candidate Starts for MoiGyank\_48:

(17, 36126), (19, 36186), (Start: 22 @36213 has 31 MA's), (Start: 23 @36225 has 1 MA's), (24, 36231), (28, 36303), (31, 36399), (36, 36477), (39, 36552), (40, 36561), (42, 36576),

Gene: NorManre\_47 Start: 35433, Stop: 35921, Start Num: 22

Candidate Starts for NorManre\_47:

(Start: 22 @35433 has 31 MA's), (24, 35451), (28, 35523), (31, 35619), (36, 35697), (39, 35772), (40, 35781), (42, 35796),

Gene: NovaSharks\_45 Start: 33585, Stop: 34022, Start Num: 22

Candidate Starts for NovaSharks\_45:

(14, 33450), (Start: 22 @33585 has 31 MA's), (Start: 23 @33597 has 1 MA's), (24, 33603), (27, 33672), (28, 33675), (31, 33771), (36, 33849), (40, 33933), (42, 33948),

Gene: OtterstedtS21\_44 Start: 34932, Stop: 35369, Start Num: 22

Candidate Starts for OtterstedtS21\_44:

(Start: 22 @34932 has 31 MA's), (Start: 23 @34944 has 1 MA's), (24, 34950), (28, 35022), (31, 35118), (36, 35196), (39, 35271), (40, 35280), (42, 35295),

Gene: ParvusTarda\_44 Start: 34437, Stop: 34874, Start Num: 22

Candidate Starts for ParvusTarda\_44:

(Start: 16 @34353 has 2 MA's), (Start: 22 @34437 has 31 MA's), (Start: 23 @34449 has 1 MA's), (24, 34455), (28, 34527), (31, 34623), (36, 34701), (39, 34776), (40, 34785), (42, 34800), (43, 34812),

Gene: Patos\_47 Start: 35433, Stop: 35870, Start Num: 22

Candidate Starts for Patos\_47:

(Start: 22 @35433 has 31 MA's), (24, 35451), (28, 35523), (31, 35619), (36, 35697), (39, 35772), (40, 35781), (42, 35796),

Gene: Pywacket\_43 Start: 35760, Stop: 36197, Start Num: 22

Candidate Starts for Pywacket\_43:

(Start: 16 @35676 has 2 MA's), (Start: 22 @35760 has 31 MA's), (Start: 23 @35772 has 1 MA's), (24, 35778), (28, 35850), (31, 35946), (36, 36024), (39, 36099), (40, 36108), (42, 36123),

Gene: Ranch\_46 Start: 34021, Stop: 34542, Start Num: 16

Candidate Starts for Ranch\_46:

(Start: 16 @34021 has 2 MA's), (Start: 22 @34105 has 31 MA's), (Start: 23 @34117 has 1 MA's), (24, 34123), (28, 34195), (31, 34291), (36, 34369), (39, 34444), (40, 34453), (42, 34468),

Gene: RazorC\_44 Start: 33974, Stop: 34411, Start Num: 22

Candidate Starts for RazorC\_44:

(14, 33839), (Start: 22 @33974 has 31 MA's), (Start: 23 @33986 has 1 MA's), (24, 33992), (27, 34061), (28, 34064), (31, 34160), (36, 34238), (40, 34322), (42, 34337),

Gene: Riduram\_43 Start: 33551, Stop: 33988, Start Num: 22

Candidate Starts for Riduram\_43:

(14, 33416), (Start: 22 @33551 has 31 MA's), (Start: 23 @33563 has 1 MA's), (24, 33569), (27, 33638), (28, 33641), (31, 33737), (36, 33815), (40, 33899), (42, 33914),

Gene: Rota\_44 Start: 35041, Stop: 35481, Start Num: 22

Candidate Starts for Rota\_44:

(Start: 22 @35041 has 31 MA's), (Start: 23 @35053 has 1 MA's), (24, 35059), (28, 35131), (31, 35227), (36, 35305), (40, 35389),

Gene: Rukungu\_47 Start: 35827, Stop: 36264, Start Num: 22

Candidate Starts for Rukungu\_47:

(Start: 16 @35743 has 2 MA's), (Start: 22 @35827 has 31 MA's), (Start: 23 @35839 has 1 MA's), (24, 35845), (28, 35917), (31, 36013), (33, 36022), (36, 36091), (39, 36166), (40, 36175), (42, 36190),

Gene: Rumi\_45 Start: 33519, Stop: 33956, Start Num: 22

Candidate Starts for Rumi\_45:

(14, 33384), (Start: 22 @33519 has 31 MA's), (Start: 23 @33531 has 1 MA's), (24, 33537), (27, 33606), (28, 33609), (31, 33705), (36, 33783), (40, 33867), (42, 33882),

Gene: Sadboi\_45 Start: 35564, Stop: 36085, Start Num: 16

Candidate Starts for Sadboi\_45:

(Start: 16 @35564 has 2 MA's), (Start: 22 @35648 has 31 MA's), (Start: 23 @35660 has 1 MA's), (24, 35666), (28, 35738), (31, 35834), (36, 35912), (39, 35987), (40, 35996), (42, 36011),

Gene: Sampudon\_45 Start: 36153, Stop: 36590, Start Num: 22

Candidate Starts for Sampudon\_45:

(Start: 16 @36069 has 2 MA's), (Start: 22 @36153 has 31 MA's), (Start: 23 @36165 has 1 MA's), (24, 36171), (28, 36243), (31, 36339), (36, 36417), (39, 36492), (40, 36501), (42, 36516),

Gene: Stormer\_46 Start: 33523, Stop: 33960, Start Num: 22

Candidate Starts for Stormer\_46:

(14, 33388), (Start: 22 @33523 has 31 MA's), (Start: 23 @33535 has 1 MA's), (24, 33541), (27, 33610), (28, 33613), (31, 33709), (36, 33787), (40, 33871), (42, 33886),

Gene: Wojtek\_43 Start: 34480, Stop: 34920, Start Num: 22

Candidate Starts for Wojtek\_43:

(Start: 16 @34396 has 2 MA's), (Start: 22 @34480 has 31 MA's), (Start: 23 @34492 has 1 MA's), (24, 34498), (28, 34570), (31, 34666), (36, 34744), (40, 34828),

Gene: Yikes\_46 Start: 36220, Stop: 36657, Start Num: 22

Candidate Starts for Yikes\_46:

(14, 36085), (Start: 22 @36220 has 31 MA's), (24, 36238), (28, 36310), (31, 36406), (36, 36484), (39, 36559), (40, 36568), (42, 36583),

Gene: Zany\_43 Start: 35057, Stop: 35494, Start Num: 22

Candidate Starts for Zany\_43:

(Start: 22 @35057 has 31 MA's), (Start: 23 @35069 has 1 MA's), (24, 35075), (28, 35147), (31, 35243), (36, 35321), (39, 35396), (40, 35405), (42, 35420), (43, 35432),