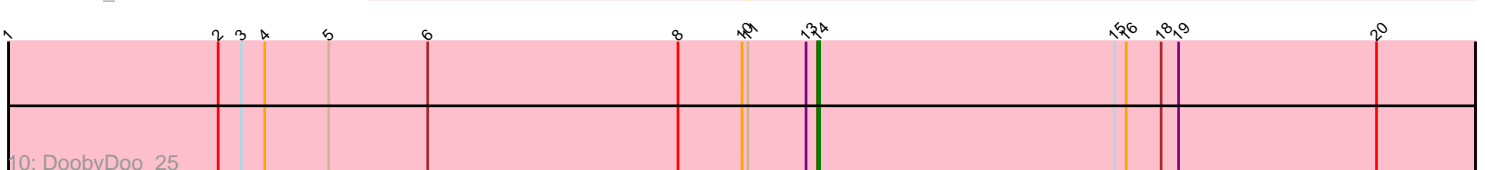
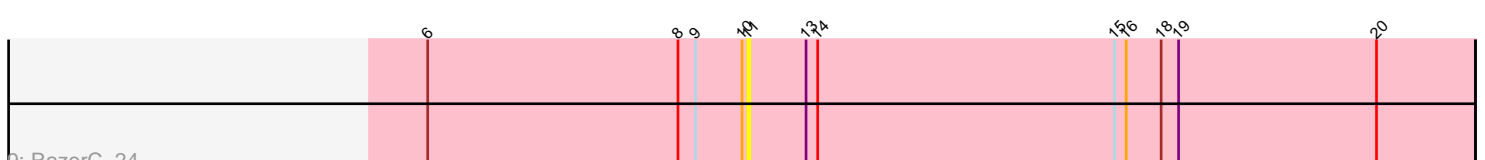
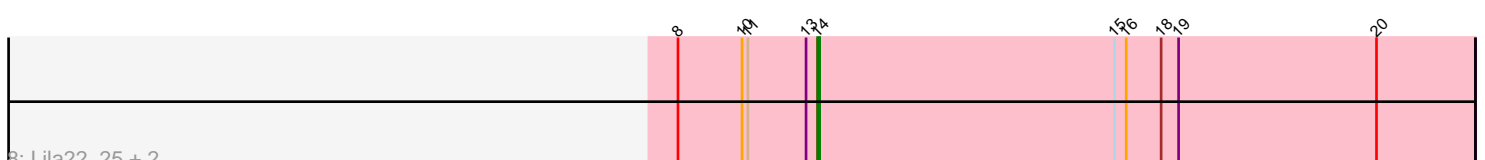
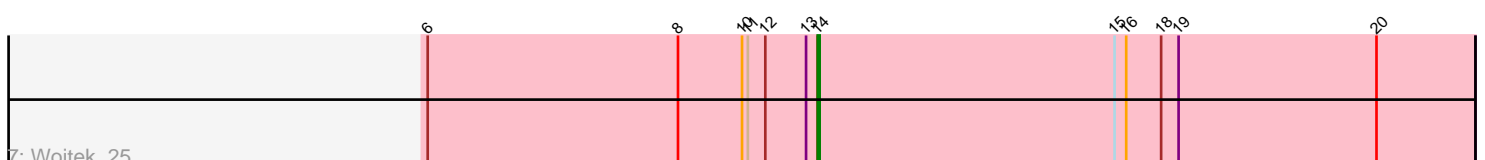
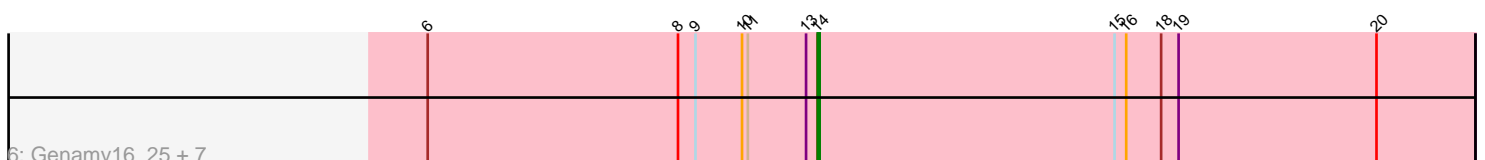
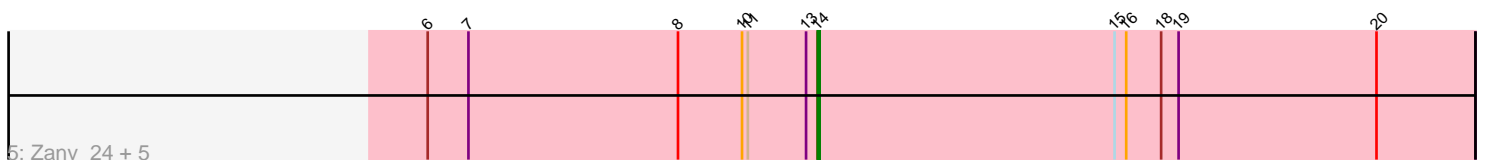
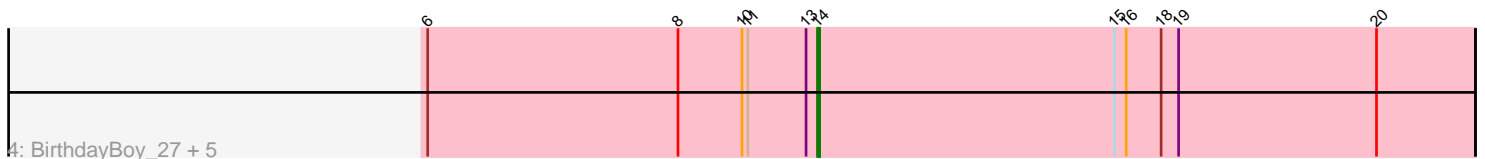
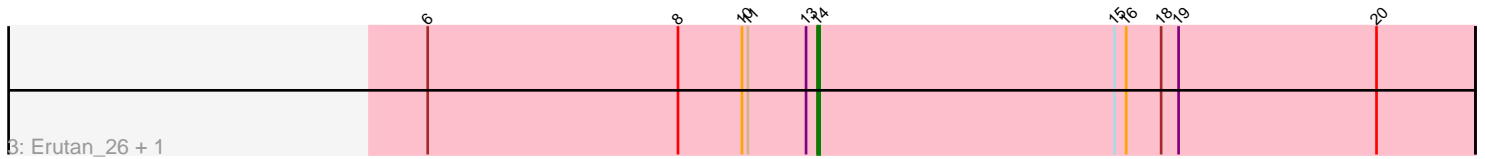
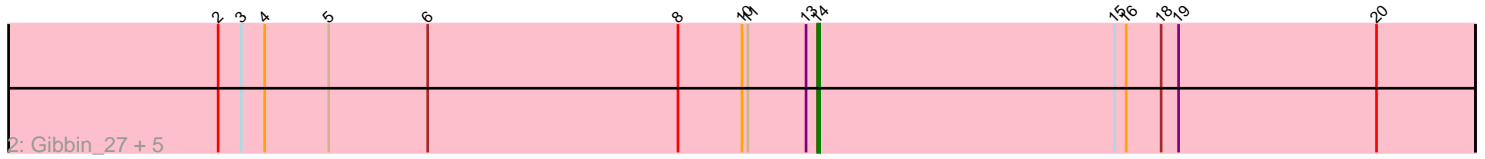
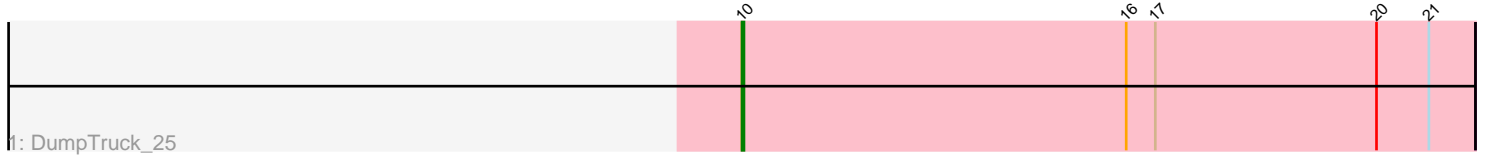


Pham 223293



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 223293 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223293 has 35 members, 8 are drafts.

Phages represented in each track:

- Track 1 : DumpTruck\_25
- Track 2 : Gibbin\_27, Mima20\_25, Patos\_27, NorManre\_27, LavAbarElk\_24, DaviePasture\_26
- Track 3 : Erutan\_26, Ranch\_26
- Track 4 : BirthdayBoy\_27, MoiGyank\_28, ParvusTarda\_26, Lambo\_26, GOATification\_27, Fulcrum\_27
- Track 5 : Zany\_24, Sadboi\_26, Yikes\_27, OtterstedtS21\_26, Alephilan\_22, GretelLyn\_26
- Track 6 : Genamy16\_25, Alyssamiracle\_25, Stormer\_24, Avian\_24, Rumi\_25, NovaSharks\_25, Jamemuya19\_23, Astralis\_23
- Track 7 : Wojtek\_25
- Track 8 : Lila22\_25, Sampudon\_26, Jalebi\_25
- Track 9 : RazorC\_24
- Track 10 : DoobyDoo\_25

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

The start number called the most often in the published annotations is 14, it was called in 26 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan\_22, Alyssamiracle\_25, Astralis\_23, Avian\_24, BirthdayBoy\_27, DaviePasture\_26, DoobyDoo\_25, Erutan\_26, Fulcrum\_27, GOATification\_27, Genamy16\_25, Gibbin\_27, GretelLyn\_26, Jalebi\_25, Jamemuya19\_23, Lambo\_26, LavAbarElk\_24, Lila22\_25, Mima20\_25, MoiGyank\_28, NorManre\_27, NovaSharks\_25, OtterstedtS21\_26, ParvusTarda\_26, Patos\_27, Ranch\_26, Rumi\_25, Sadboi\_26, Sampudon\_26, Stormer\_24, Wojtek\_25, Yikes\_27, Zany\_24,

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

- RazorC\_24,

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

- DumpTruck\_25,

## Summary by start number:

### Start 10:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 2.9% of time when present
- Phage (with cluster) where this start called: DumpTruck\_25 (DV),

### Start 11:

- Found in 34 of 35 ( 97.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.9% of time when present
- Phage (with cluster) where this start called: RazorC\_24 (DV),

### Start 14:

- Found in 34 of 35 ( 97.1% ) of genes in pham
- Manual Annotations of this start: 26 of 27
- Called 97.1% of time when present
- Phage (with cluster) where this start called: Alephilan\_22 (DV), Alyssamiracle\_25 (DV), Astralis\_23 (DV), Avian\_24 (DV), BirthdayBoy\_27 (DV), DaviePasture\_26 (DV), DoobyDoo\_25 (DV), Erutan\_26 (DV), Fulcrum\_27 (DV), GOATification\_27 (DV), Genamy16\_25 (DV), Gibbin\_27 (DV), GretelLyn\_26 (DV), Jalebi\_25 (DV), Jamemuya19\_23 (DV), Lambo\_26 (DV), LavAbarElk\_24 (DV), Lila22\_25 (DV), Mima20\_25 (DV), MoiGyank\_28 (DV), NorManre\_27 (DV), NovaSharks\_25 (DV), OtterstedtS21\_26 (DV), ParvusTarda\_26 (DV), Patos\_27 (DV), Ranch\_26 (DV), Rumi\_25 (DV), Sadboi\_26 (DV), Sampudon\_26 (DV), Stormer\_24 (DV), Wojtek\_25 (DV), Yikes\_27 (DV), Zany\_24 (DV),

## Summary by clusters:

There is one cluster represented in this pham: DV

### Info for manual annotations of cluster DV:

- Start number 10 was manually annotated 1 time for cluster DV.
- Start number 14 was manually annotated 26 times for cluster DV.

## Gene Information:

Gene: Alephilan\_22 Start: 16408, Stop: 16746, Start Num: 14

Candidate Starts for Alephilan\_22:

(6, 16207), (7, 16228), (8, 16336), (Start: 10 @16369 has 1 MA's), (11, 16372), (13, 16402), (Start: 14 @16408 has 26 MA's), (15, 16561), (16, 16567), (18, 16585), (19, 16594), (20, 16696),

Gene: Alyssamiracle\_25 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Alyssamiracle\_25:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Astralis\_23 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Astralis\_23:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Avian\_24 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Avian\_24:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: BirthdayBoy\_27 Start: 17252, Stop: 17590, Start Num: 14

Candidate Starts for BirthdayBoy\_27:

(6, 17051), (8, 17180), (Start: 10 @17213 has 1 MA's), (11, 17216), (13, 17246), (Start: 14 @17252 has 26 MA's), (15, 17405), (16, 17411), (18, 17429), (19, 17438), (20, 17540),

Gene: DaviePasture\_26 Start: 17021, Stop: 17359, Start Num: 14

Candidate Starts for DaviePasture\_26:

(2, 16712), (3, 16724), (4, 16736), (5, 16769), (6, 16820), (8, 16949), (Start: 10 @16982 has 1 MA's), (11, 16985), (13, 17015), (Start: 14 @17021 has 26 MA's), (15, 17174), (16, 17180), (18, 17198), (19, 17207), (20, 17309),

Gene: DoobyDoo\_25 Start: 16186, Stop: 16524, Start Num: 14

Candidate Starts for DoobyDoo\_25:

(1, 15769), (2, 15877), (3, 15889), (4, 15901), (5, 15934), (6, 15985), (8, 16114), (Start: 10 @16147 has 1 MA's), (11, 16150), (13, 16180), (Start: 14 @16186 has 26 MA's), (15, 16339), (16, 16345), (18, 16363), (19, 16372), (20, 16474),

Gene: DumpTruck\_25 Start: 16400, Stop: 16777, Start Num: 10

Candidate Starts for DumpTruck\_25:

(Start: 10 @16400 has 1 MA's), (16, 16598), (17, 16613), (20, 16727), (21, 16754),

Gene: Erutan\_26 Start: 16699, Stop: 17037, Start Num: 14

Candidate Starts for Erutan\_26:

(6, 16498), (8, 16627), (Start: 10 @16660 has 1 MA's), (11, 16663), (13, 16693), (Start: 14 @16699 has 26 MA's), (15, 16852), (16, 16858), (18, 16876), (19, 16885), (20, 16987),

Gene: Fulcrum\_27 Start: 17232, Stop: 17570, Start Num: 14

Candidate Starts for Fulcrum\_27:

(6, 17031), (8, 17160), (Start: 10 @17193 has 1 MA's), (11, 17196), (13, 17226), (Start: 14 @17232 has 26 MA's), (15, 17385), (16, 17391), (18, 17409), (19, 17418), (20, 17520),

Gene: GOATification\_27 Start: 17232, Stop: 17570, Start Num: 14

Candidate Starts for GOATification\_27:

(6, 17031), (8, 17160), (Start: 10 @17193 has 1 MA's), (11, 17196), (13, 17226), (Start: 14 @17232 has 26 MA's), (15, 17385), (16, 17391), (18, 17409), (19, 17418), (20, 17520),

Gene: Genamy16\_25 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Genamy16\_25:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Gibbin\_27 Start: 17304, Stop: 17642, Start Num: 14

Candidate Starts for Gibbin\_27:

(2, 16995), (3, 17007), (4, 17019), (5, 17052), (6, 17103), (8, 17232), (Start: 10 @17265 has 1 MA's), (11, 17268), (13, 17298), (Start: 14 @17304 has 26 MA's), (15, 17457), (16, 17463), (18, 17481), (19,

17490), (20, 17592),

Gene: GretellYn\_26 Start: 17566, Stop: 17904, Start Num: 14

Candidate Starts for GretellYn\_26:

(6, 17365), (7, 17386), (8, 17494), (Start: 10 @17527 has 1 MA's), (11, 17530), (13, 17560), (Start: 14 @17566 has 26 MA's), (15, 17719), (16, 17725), (18, 17743), (19, 17752), (20, 17854),

Gene: Jalebi\_25 Start: 17742, Stop: 18080, Start Num: 14

Candidate Starts for Jalebi\_25:

(8, 17670), (Start: 10 @17703 has 1 MA's), (11, 17706), (13, 17736), (Start: 14 @17742 has 26 MA's), (15, 17895), (16, 17901), (18, 17919), (19, 17928), (20, 18030),

Gene: Jamemuya19\_23 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Jamemuya19\_23:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Lambo\_26 Start: 17244, Stop: 17582, Start Num: 14

Candidate Starts for Lambo\_26:

(6, 17043), (8, 17172), (Start: 10 @17205 has 1 MA's), (11, 17208), (13, 17238), (Start: 14 @17244 has 26 MA's), (15, 17397), (16, 17403), (18, 17421), (19, 17430), (20, 17532),

Gene: LavAbarElk\_24 Start: 15681, Stop: 16019, Start Num: 14

Candidate Starts for LavAbarElk\_24:

(2, 15372), (3, 15384), (4, 15396), (5, 15429), (6, 15480), (8, 15609), (Start: 10 @15642 has 1 MA's), (11, 15645), (13, 15675), (Start: 14 @15681 has 26 MA's), (15, 15834), (16, 15840), (18, 15858), (19, 15867), (20, 15969),

Gene: Lila22\_25 Start: 17190, Stop: 17528, Start Num: 14

Candidate Starts for Lila22\_25:

(8, 17118), (Start: 10 @17151 has 1 MA's), (11, 17154), (13, 17184), (Start: 14 @17190 has 26 MA's), (15, 17343), (16, 17349), (18, 17367), (19, 17376), (20, 17478),

Gene: Mima20\_25 Start: 16931, Stop: 17269, Start Num: 14

Candidate Starts for Mima20\_25:

(2, 16622), (3, 16634), (4, 16646), (5, 16679), (6, 16730), (8, 16859), (Start: 10 @16892 has 1 MA's), (11, 16895), (13, 16925), (Start: 14 @16931 has 26 MA's), (15, 17084), (16, 17090), (18, 17108), (19, 17117), (20, 17219),

Gene: MoiGyank\_28 Start: 17603, Stop: 17941, Start Num: 14

Candidate Starts for MoiGyank\_28:

(6, 17402), (8, 17531), (Start: 10 @17564 has 1 MA's), (11, 17567), (13, 17597), (Start: 14 @17603 has 26 MA's), (15, 17756), (16, 17762), (18, 17780), (19, 17789), (20, 17891),

Gene: NorManre\_27 Start: 16810, Stop: 17148, Start Num: 14

Candidate Starts for NorManre\_27:

(2, 16501), (3, 16513), (4, 16525), (5, 16558), (6, 16609), (8, 16738), (Start: 10 @16771 has 1 MA's), (11, 16774), (13, 16804), (Start: 14 @16810 has 26 MA's), (15, 16963), (16, 16969), (18, 16987), (19, 16996), (20, 17098),

Gene: NovaSharks\_25 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for NovaSharks\_25:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: OtterstedtS21\_26 Start: 16888, Stop: 17226, Start Num: 14

Candidate Starts for OtterstedtS21\_26:

(6, 16687), (7, 16708), (8, 16816), (Start: 10 @16849 has 1 MA's), (11, 16852), (13, 16882), (Start: 14 @16888 has 26 MA's), (15, 17041), (16, 17047), (18, 17065), (19, 17074), (20, 17176),

Gene: ParvusTarda\_26 Start: 16370, Stop: 16708, Start Num: 14

Candidate Starts for ParvusTarda\_26:

(6, 16169), (8, 16298), (Start: 10 @16331 has 1 MA's), (11, 16334), (13, 16364), (Start: 14 @16370 has 26 MA's), (15, 16523), (16, 16529), (18, 16547), (19, 16556), (20, 16658),

Gene: Patos\_27 Start: 16810, Stop: 17148, Start Num: 14

Candidate Starts for Patos\_27:

(2, 16501), (3, 16513), (4, 16525), (5, 16558), (6, 16609), (8, 16738), (Start: 10 @16771 has 1 MA's), (11, 16774), (13, 16804), (Start: 14 @16810 has 26 MA's), (15, 16963), (16, 16969), (18, 16987), (19, 16996), (20, 17098),

Gene: Ranch\_26 Start: 15736, Stop: 16074, Start Num: 14

Candidate Starts for Ranch\_26:

(6, 15535), (8, 15664), (Start: 10 @15697 has 1 MA's), (11, 15700), (13, 15730), (Start: 14 @15736 has 26 MA's), (15, 15889), (16, 15895), (18, 15913), (19, 15922), (20, 16024),

Gene: RazorC\_24 Start: 14769, Stop: 15143, Start Num: 11

Candidate Starts for RazorC\_24:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Rumi\_25 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Rumi\_25:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Sadboi\_26 Start: 17566, Stop: 17904, Start Num: 14

Candidate Starts for Sadboi\_26:

(6, 17365), (7, 17386), (8, 17494), (Start: 10 @17527 has 1 MA's), (11, 17530), (13, 17560), (Start: 14 @17566 has 26 MA's), (15, 17719), (16, 17725), (18, 17743), (19, 17752), (20, 17854),

Gene: Sampudon\_26 Start: 17742, Stop: 18080, Start Num: 14

Candidate Starts for Sampudon\_26:

(8, 17670), (Start: 10 @17703 has 1 MA's), (11, 17706), (13, 17736), (Start: 14 @17742 has 26 MA's), (15, 17895), (16, 17901), (18, 17919), (19, 17928), (20, 18030),

Gene: Stormer\_24 Start: 14805, Stop: 15143, Start Num: 14

Candidate Starts for Stormer\_24:

(6, 14604), (8, 14733), (9, 14742), (Start: 10 @14766 has 1 MA's), (11, 14769), (13, 14799), (Start: 14 @14805 has 26 MA's), (15, 14958), (16, 14964), (18, 14982), (19, 14991), (20, 15093),

Gene: Wojtek\_25 Start: 16443, Stop: 16781, Start Num: 14

Candidate Starts for Wojtek\_25:

(6, 16242), (8, 16371), (Start: 10 @16404 has 1 MA's), (11, 16407), (12, 16416), (13, 16437), (Start: 14 @16443 has 26 MA's), (15, 16596), (16, 16602), (18, 16620), (19, 16629), (20, 16731),

Gene: Yikes\_27 Start: 17827, Stop: 18165, Start Num: 14

Candidate Starts for Yikes\_27:

(6, 17626), (7, 17647), (8, 17755), (Start: 10 @17788 has 1 MA's), (11, 17791), (13, 17821), (Start: 14 @17827 has 26 MA's), (15, 17980), (16, 17986), (18, 18004), (19, 18013), (20, 18115),

Gene: Zany\_24 Start: 16956, Stop: 17294, Start Num: 14

Candidate Starts for Zany\_24:

(6, 16755), (7, 16776), (8, 16884), (Start: 10 @16917 has 1 MA's), (11, 16920), (13, 16950), (Start: 14 @16956 has 26 MA's), (15, 17109), (16, 17115), (18, 17133), (19, 17142), (20, 17244),