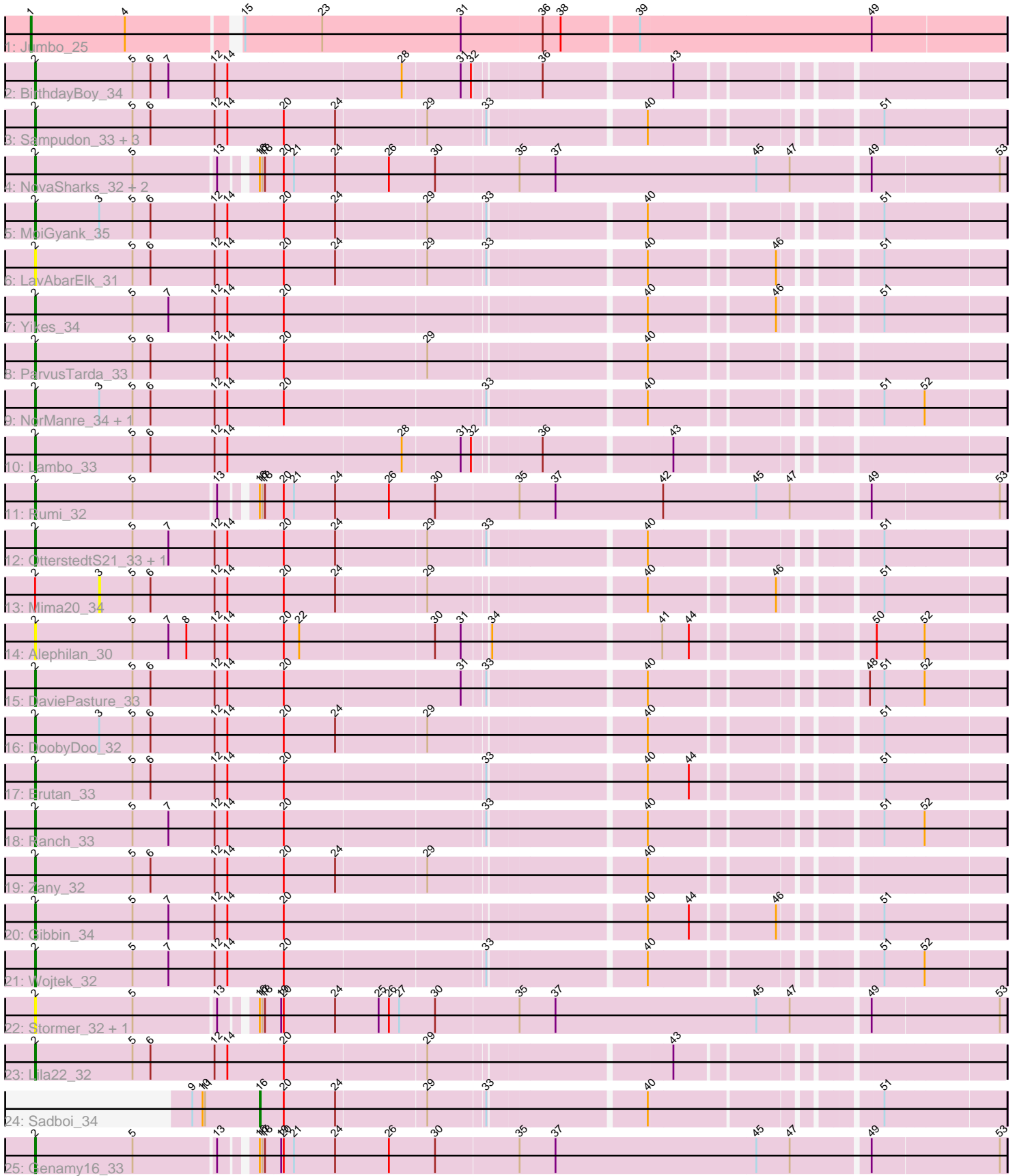


Pham 216399



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 216399 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216399 has 33 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Jumbo\_25
- Track 2 : BirthdayBoy\_34
- Track 3 : Sampudon\_33, Jalebi\_32, GOATification\_34, Fulcrum\_34
- Track 4 : NovaSharks\_32, RazorC\_31, Alyssamiracle\_33
- Track 5 : MoiGyank\_35
- Track 6 : LavAbarElk\_31
- Track 7 : Yikes\_34
- Track 8 : ParvusTarda\_33
- Track 9 : NorManre\_34, Patos\_34
- Track 10 : Lambo\_33
- Track 11 : Rumi\_32
- Track 12 : OtterstedtS21\_33, Gretellyn\_33
- Track 13 : Mima20\_34
- Track 14 : Alephilan\_30
- Track 15 : DaviePasture\_33
- Track 16 : DoobyDoo\_32
- Track 17 : Erutan\_33
- Track 18 : Ranch\_33
- Track 19 : Zany\_32
- Track 20 : Gibbin\_34
- Track 21 : Wojtek\_32
- Track 22 : Stormer\_32, Avian\_31
- Track 23 : Lila22\_32
- Track 24 : Sadboi\_34
- Track 25 : Genamy16\_33

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

The start number called the most often in the published annotations is 2, it was called in 25 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan\_30, Alyssamiracle\_33, Avian\_31, BirthdayBoy\_34, DaviePasture\_33, DoobyDoo\_32, Erutan\_33, Fulcrum\_34, GOATification\_34, Genamy16\_33,

Gibbin\_34, Gretellyn\_33, Jalebi\_32, Lambo\_33, LavAbarElk\_31, Lila22\_32, MoiGyank\_35, NorManre\_34, NovaSharks\_32, OtterstedtS21\_33, ParvusTarda\_33, Patos\_34, Ranch\_33, RazorC\_31, Rumi\_32, Sampudon\_33, Stormer\_32, Wojtek\_32, Yikes\_34, Zany\_32,

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

- Mima20\_34,

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

- Jumbo\_25, Sadboi\_34,

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

Start 1:

- Found in 1 of 33 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo\_25 (DF3),

Start 2:

- Found in 31 of 33 ( 93.9% ) of genes in pham
- Manual Annotations of this start: 25 of 27
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Alephilan\_30 (DV), Alyssamiracle\_33 (DV), Avian\_31 (DV), BirthdayBoy\_34 (DV), DaviePasture\_33 (DV), DoobyDoo\_32 (DV), Erutan\_33 (DV), Fulcrum\_34 (DV), GOATification\_34 (DV), Genamy16\_33 (DV), Gibbin\_34 (DV), Gretellyn\_33 (DV), Jalebi\_32 (DV), Lambo\_33 (DV), LavAbarElk\_31 (DV), Lila22\_32 (DV), MoiGyank\_35 (DV), NorManre\_34 (DV), NovaSharks\_32 (DV), OtterstedtS21\_33 (DV), ParvusTarda\_33 (DV), Patos\_34 (DV), Ranch\_33 (DV), RazorC\_31 (DV), Rumi\_32 (DV), Sampudon\_33 (DV), Stormer\_32 (DV), Wojtek\_32 (DV), Yikes\_34 (DV), Zany\_32 (DV),

Start 3:

- Found in 5 of 33 ( 15.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Mima20\_34 (DV),

Start 16:

- Found in 8 of 33 ( 24.2% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Sadboi\_34 (DV),

### **Summary by clusters:**

There are 2 clusters represented in this pham: DV, DF3,

Info for manual annotations of cluster DF3:

- Start number 1 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DV:

- Start number 2 was manually annotated 25 times for cluster DV.

- Start number 16 was manually annotated 1 time for cluster DV.

### **Gene Information:**

Gene: Alephilan\_30 Start: 28717, Stop: 29766, Start Num: 2

Candidate Starts for Alephilan\_30:

(Start: 2 @28717 has 25 MA's), (5, 28831), (7, 28873), (8, 28894), (12, 28927), (14, 28942), (20, 29005), (22, 29023), (30, 29176), (31, 29206), (34, 29233), (41, 29416), (44, 29446), (50, 29620), (52, 29674),

Gene: Alyssamiracle\_33 Start: 27521, Stop: 28618, Start Num: 2

Candidate Starts for Alyssamiracle\_33:

(Start: 2 @27521 has 25 MA's), (5, 27635), (13, 27728), (Start: 16 @27761 has 1 MA's), (17, 27764), (18, 27767), (20, 27788), (21, 27800), (24, 27848), (26, 27911), (30, 27965), (35, 28061), (37, 28103), (45, 28337), (47, 28376), (49, 28463), (53, 28610),

Gene: Avian\_31 Start: 27503, Stop: 28600, Start Num: 2

Candidate Starts for Avian\_31:

(Start: 2 @27503 has 25 MA's), (5, 27617), (13, 27710), (Start: 16 @27743 has 1 MA's), (17, 27746), (18, 27749), (19, 27767), (20, 27770), (24, 27830), (25, 27881), (26, 27893), (27, 27905), (30, 27947), (35, 28043), (37, 28085), (45, 28319), (47, 28358), (49, 28445), (53, 28592),

Gene: BirthdayBoy\_34 Start: 29543, Stop: 30589, Start Num: 2

Candidate Starts for BirthdayBoy\_34:

(Start: 2 @29543 has 25 MA's), (5, 29657), (6, 29678), (7, 29699), (12, 29753), (14, 29768), (28, 29966), (31, 30032), (32, 30044), (36, 30113), (43, 30254),

Gene: DaviePasture\_33 Start: 29342, Stop: 30391, Start Num: 2

Candidate Starts for DaviePasture\_33:

(Start: 2 @29342 has 25 MA's), (5, 29456), (6, 29477), (12, 29552), (14, 29567), (20, 29630), (31, 29831), (33, 29855), (40, 30026), (48, 30239), (51, 30254), (52, 30299),

Gene: DoobyDoo\_32 Start: 28492, Stop: 29541, Start Num: 2

Candidate Starts for DoobyDoo\_32:

(Start: 2 @28492 has 25 MA's), (3, 28567), (5, 28606), (6, 28627), (12, 28702), (14, 28717), (20, 28780), (24, 28840), (29, 28942), (40, 29176), (51, 29404),

Gene: Erutan\_33 Start: 29002, Stop: 30048, Start Num: 2

Candidate Starts for Erutan\_33:

(Start: 2 @29002 has 25 MA's), (5, 29116), (6, 29137), (12, 29212), (14, 29227), (20, 29290), (33, 29515), (40, 29686), (44, 29731), (51, 29914),

Gene: Fulcrum\_34 Start: 29520, Stop: 30569, Start Num: 2

Candidate Starts for Fulcrum\_34:

(Start: 2 @29520 has 25 MA's), (5, 29634), (6, 29655), (12, 29730), (14, 29745), (20, 29808), (24, 29868), (29, 29970), (33, 30033), (40, 30204), (51, 30432),

Gene: GOATification\_34 Start: 29520, Stop: 30569, Start Num: 2

Candidate Starts for GOATification\_34:

(Start: 2 @29520 has 25 MA's), (5, 29634), (6, 29655), (12, 29730), (14, 29745), (20, 29808), (24, 29868), (29, 29970), (33, 30033), (40, 30204), (51, 30432),

Gene: Genamy16\_33 Start: 27521, Stop: 28618, Start Num: 2

Candidate Starts for Genamy16\_33:

(Start: 2 @27521 has 25 MA's), (5, 27635), (13, 27728), (Start: 16 @27761 has 1 MA's), (17, 27764), (18, 27767), (19, 27785), (20, 27788), (21, 27800), (24, 27848), (26, 27911), (30, 27965), (35, 28061), (37, 28103), (45, 28337), (47, 28376), (49, 28463), (53, 28610),

Gene: Gibbin\_34 Start: 29619, Stop: 30668, Start Num: 2

Candidate Starts for Gibbin\_34:

(Start: 2 @29619 has 25 MA's), (5, 29733), (7, 29775), (12, 29829), (14, 29844), (20, 29907), (40, 30303), (44, 30348), (46, 30438), (51, 30531),

Gene: Gretellyn\_33 Start: 29878, Stop: 30933, Start Num: 2

Candidate Starts for Gretellyn\_33:

(Start: 2 @29878 has 25 MA's), (5, 29992), (7, 30034), (12, 30088), (14, 30103), (20, 30166), (24, 30226), (29, 30328), (33, 30391), (40, 30562), (51, 30796),

Gene: Jalebi\_32 Start: 30054, Stop: 31103, Start Num: 2

Candidate Starts for Jalebi\_32:

(Start: 2 @30054 has 25 MA's), (5, 30168), (6, 30189), (12, 30264), (14, 30279), (20, 30342), (24, 30402), (29, 30504), (33, 30567), (40, 30738), (51, 30966),

Gene: Jumbo\_25 Start: 36377, Stop: 37471, Start Num: 1

Candidate Starts for Jumbo\_25:

(Start: 1 @36377 has 1 MA's), (4, 36485), (15, 36602), (23, 36689), (31, 36851), (36, 36944), (38, 36965), (39, 37052), (49, 37319),

Gene: Lambo\_33 Start: 29541, Stop: 30587, Start Num: 2

Candidate Starts for Lambo\_33:

(Start: 2 @29541 has 25 MA's), (5, 29655), (6, 29676), (12, 29751), (14, 29766), (28, 29964), (31, 30030), (32, 30042), (36, 30111), (43, 30252),

Gene: LavAbarElk\_31 Start: 27993, Stop: 29042, Start Num: 2

Candidate Starts for LavAbarElk\_31:

(Start: 2 @27993 has 25 MA's), (5, 28107), (6, 28128), (12, 28203), (14, 28218), (20, 28281), (24, 28341), (29, 28443), (33, 28506), (40, 28677), (46, 28812), (51, 28905),

Gene: Lila22\_32 Start: 29496, Stop: 30542, Start Num: 2

Candidate Starts for Lila22\_32:

(Start: 2 @29496 has 25 MA's), (5, 29610), (6, 29631), (12, 29706), (14, 29721), (20, 29784), (29, 29946), (43, 30207),

Gene: Mima20\_34 Start: 29318, Stop: 30292, Start Num: 3

Candidate Starts for Mima20\_34:

(Start: 2 @29243 has 25 MA's), (3, 29318), (5, 29357), (6, 29378), (12, 29453), (14, 29468), (20, 29531), (24, 29591), (29, 29693), (40, 29927), (46, 30062), (51, 30155),

Gene: MoiGyank\_35 Start: 29924, Stop: 30973, Start Num: 2

Candidate Starts for MoiGyank\_35:

(Start: 2 @29924 has 25 MA's), (3, 29999), (5, 30038), (6, 30059), (12, 30134), (14, 30149), (20, 30212), (24, 30272), (29, 30374), (33, 30437), (40, 30608), (51, 30836),

Gene: NorManre\_34 Start: 29125, Stop: 30174, Start Num: 2

Candidate Starts for NorManre\_34:

(Start: 2 @29125 has 25 MA's), (3, 29200), (5, 29239), (6, 29260), (12, 29335), (14, 29350), (20, 29413), (33, 29638), (40, 29809), (51, 30037), (52, 30082),

Gene: NovaSharks\_32 Start: 27111, Stop: 28208, Start Num: 2

Candidate Starts for NovaSharks\_32:

(Start: 2 @27111 has 25 MA's), (5, 27225), (13, 27318), (Start: 16 @27351 has 1 MA's), (17, 27354), (18, 27357), (20, 27378), (21, 27390), (24, 27438), (26, 27501), (30, 27555), (35, 27651), (37, 27693), (45, 27927), (47, 27966), (49, 28053), (53, 28200),

Gene: OtterstedtS21\_33 Start: 29200, Stop: 30249, Start Num: 2

Candidate Starts for OtterstedtS21\_33:

(Start: 2 @29200 has 25 MA's), (5, 29314), (7, 29356), (12, 29410), (14, 29425), (20, 29488), (24, 29548), (29, 29650), (33, 29713), (40, 29884), (51, 30112),

Gene: ParvusTarda\_33 Start: 28670, Stop: 29716, Start Num: 2

Candidate Starts for ParvusTarda\_33:

(Start: 2 @28670 has 25 MA's), (5, 28784), (6, 28805), (12, 28880), (14, 28895), (20, 28958), (29, 29120), (40, 29354),

Gene: Patos\_34 Start: 29125, Stop: 30174, Start Num: 2

Candidate Starts for Patos\_34:

(Start: 2 @29125 has 25 MA's), (3, 29200), (5, 29239), (6, 29260), (12, 29335), (14, 29350), (20, 29413), (33, 29638), (40, 29809), (51, 30037), (52, 30082),

Gene: Ranch\_33 Start: 28024, Stop: 29073, Start Num: 2

Candidate Starts for Ranch\_33:

(Start: 2 @28024 has 25 MA's), (5, 28138), (7, 28180), (12, 28234), (14, 28249), (20, 28312), (33, 28537), (40, 28708), (51, 28936), (52, 28981),

Gene: RazorC\_31 Start: 27503, Stop: 28600, Start Num: 2

Candidate Starts for RazorC\_31:

(Start: 2 @27503 has 25 MA's), (5, 27617), (13, 27710), (Start: 16 @27743 has 1 MA's), (17, 27746), (18, 27749), (20, 27770), (21, 27782), (24, 27830), (26, 27893), (30, 27947), (35, 28043), (37, 28085), (45, 28319), (47, 28358), (49, 28445), (53, 28592),

Gene: Rumi\_32 Start: 27114, Stop: 28211, Start Num: 2

Candidate Starts for Rumi\_32:

(Start: 2 @27114 has 25 MA's), (5, 27228), (13, 27321), (Start: 16 @27354 has 1 MA's), (17, 27357), (18, 27360), (20, 27381), (21, 27393), (24, 27441), (26, 27504), (30, 27558), (35, 27654), (37, 27696), (42, 27822), (45, 27930), (47, 27969), (49, 28056), (53, 28203),

Gene: Sadboi\_34 Start: 30140, Stop: 30934, Start Num: 16

Candidate Starts for Sadboi\_34:

(9, 30062), (10, 30074), (11, 30077), (Start: 16 @30140 has 1 MA's), (20, 30167), (24, 30227), (29, 30329), (33, 30392), (40, 30563), (51, 30797),

Gene: Sampudon\_33 Start: 30054, Stop: 31103, Start Num: 2

Candidate Starts for Sampudon\_33:

(Start: 2 @30054 has 25 MA's), (5, 30168), (6, 30189), (12, 30264), (14, 30279), (20, 30342), (24, 30402), (29, 30504), (33, 30567), (40, 30738), (51, 30966),

Gene: Stormer\_32 Start: 27117, Stop: 28214, Start Num: 2

Candidate Starts for Stormer\_32:

(Start: 2 @27117 has 25 MA's), (5, 27231), (13, 27324), (Start: 16 @27357 has 1 MA's), (17, 27360), (18, 27363), (19, 27381), (20, 27384), (24, 27444), (25, 27495), (26, 27507), (27, 27519), (30, 27561), (35, 27657), (37, 27699), (45, 27933), (47, 27972), (49, 28059), (53, 28206),

Gene: Wojtek\_32 Start: 28749, Stop: 29798, Start Num: 2

Candidate Starts for Wojtek\_32:

(Start: 2 @28749 has 25 MA's), (5, 28863), (7, 28905), (12, 28959), (14, 28974), (20, 29037), (33, 29262), (40, 29433), (51, 29661), (52, 29706),

Gene: Yikes\_34 Start: 30133, Stop: 31182, Start Num: 2

Candidate Starts for Yikes\_34:

(Start: 2 @30133 has 25 MA's), (5, 30247), (7, 30289), (12, 30343), (14, 30358), (20, 30421), (40, 30817), (46, 30952), (51, 31045),

Gene: Zany\_32 Start: 29660, Stop: 30706, Start Num: 2

Candidate Starts for Zany\_32:

(Start: 2 @29660 has 25 MA's), (5, 29774), (6, 29795), (12, 29870), (14, 29885), (20, 29948), (24, 30008), (29, 30110), (40, 30344),