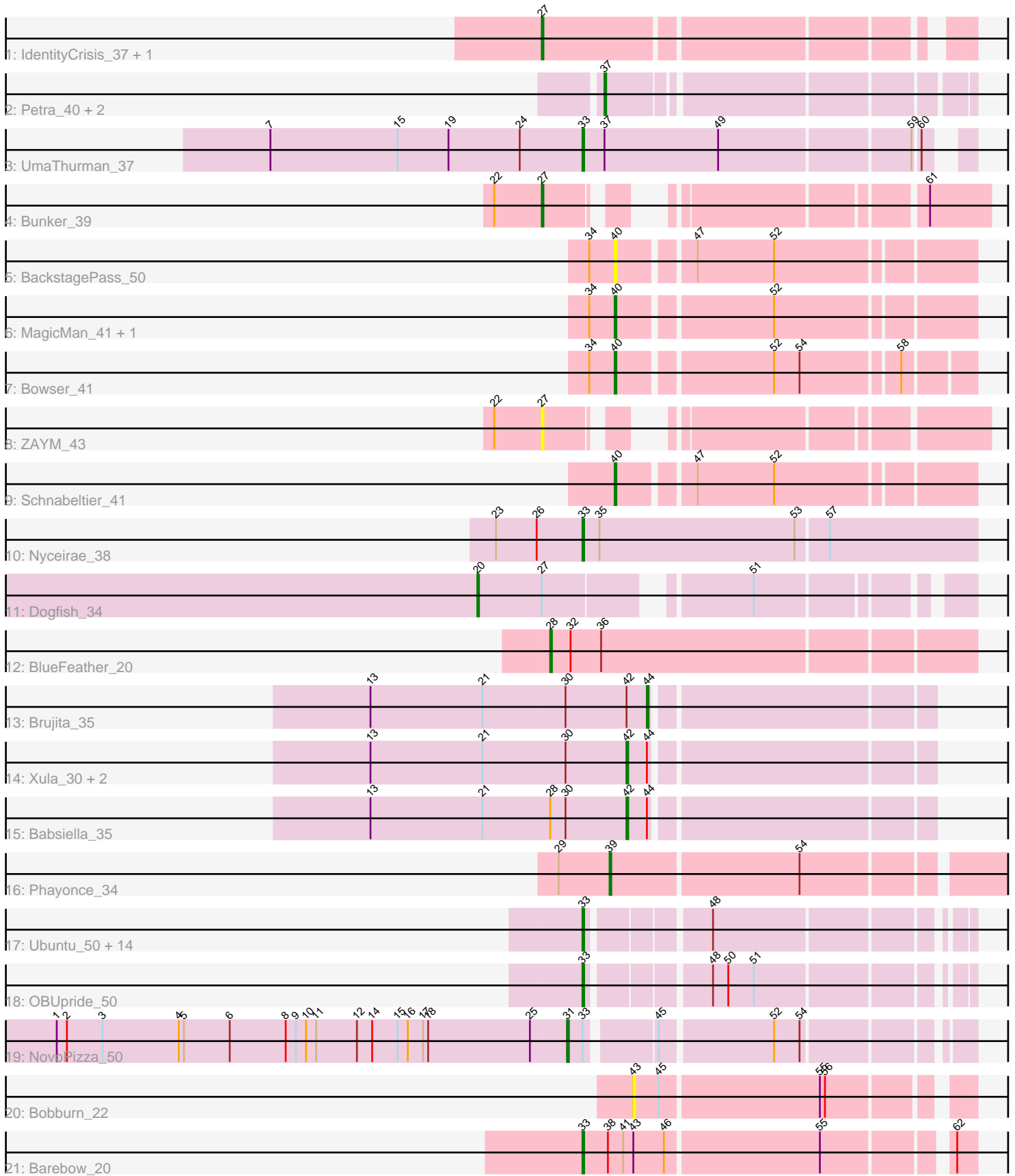


# Pham 294880



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 294880 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294880 has 41 members, 5 are drafts.

Phages represented in each track:

- Track 1 : IdentityCrisis\_37, WST1\_38
- Track 2 : Petra\_40, Zarbodnamra\_42, Obliviate\_39
- Track 3 : UmaThurman\_37
- Track 4 : Bunker\_39
- Track 5 : BackstagePass\_50
- Track 6 : MagicMan\_41, Eyes\_39
- Track 7 : Bowser\_41
- Track 8 : ZAYM\_43
- Track 9 : Schnabeltier\_41
- Track 10 : Nyceirae\_38
- Track 11 : Dogfish\_34
- Track 12 : BlueFeather\_20
- Track 13 : Brujita\_35
- Track 14 : Xula\_30, Island3\_35, QueenHazel\_31
- Track 15 : Babsiella\_35
- Track 16 : Phayonce\_34
- Track 17 : Ubuntu\_50, BloominB\_50, Hadrien\_50, Forge\_48, Webster2\_50, Ein37\_50, Amymech\_50, DeepSoil15\_50, Amochick\_50, Gancho\_49, Daegal\_52, LilHazelNut\_50, Luke\_50, Evanesce\_49, Kinbote\_50
- Track 18 : OBUpride\_50
- Track 19 : NovoPizza\_50
- Track 20 : Bobburn\_22
- Track 21 : Barebow\_20

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

The start number called the most often in the published annotations is 33, it was called in 18 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amochick\_50, Amymech\_50, Barebow\_20, BloominB\_50, Daegal\_52, DeepSoil15\_50, Ein37\_50, Evanesce\_49, Forge\_48, Gancho\_49, Hadrien\_50, Kinbote\_50, LilHazelNut\_50, Luke\_50, Nyceirae\_38, OBUpride\_50, Ubuntu\_50, UmaThurman\_37, Webster2\_50,

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

- NovoPizza\_50,

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

- Babsiella\_35, BackstagePass\_50, BlueFeather\_20, Bobburn\_22, Bowser\_41, Brujita\_35, Bunker\_39, Dogfish\_34, Eyes\_39, IdentityCrisis\_37, Island3\_35, MagicMan\_41, Obliviate\_39, Petra\_40, Phayonce\_34, QueenHazel\_31, Schnabeltier\_41, WST1\_38, Xula\_30, ZAYM\_43, Zarbodnamra\_42,

### Summary by start number:

Start 20:

- 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: Dogfish\_34 (DT),

Start 27:

- Found in 5 of 41 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bunker\_39 (DB), IdentityCrisis\_37 (AJ), WST1\_38 (AJ), ZAYM\_43 (DB),

Start 28:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BlueFeather\_20 (FE),

Start 31:

- 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: NovoPizza\_50 (Q),

Start 33:

- Found in 20 of 41 ( 48.8% ) of genes in pham
- Manual Annotations of this start: 18 of 36
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Amochick\_50 (Q), Amymech\_50 (Q), Barebow\_20 (singleton), BloominB\_50 (Q), Daegal\_52 (Q), DeepSoil15\_50 (Q), Ein37\_50 (Q), Evanesce\_49 (Q), Forge\_48 (Q), Gancho\_49 (Q), Hadrien\_50 (Q), Kinbote\_50 (Q), LilHazelnut\_50 (Q), Luke\_50 (Q), Nyceirae\_38 (DT), OBUpride\_50 (Q), Ubuntu\_50 (Q), UmaThurman\_37 (CV), Webster2\_50 (Q),

Start 37:

- Found in 4 of 41 ( 9.8% ) of genes in pham
- Manual Annotations of this start: 3 of 36
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Obliviate\_39 (CV), Petra\_40 (CV), Zarbodnamra\_42 (CV),

Start 39:

- 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: Phayonce\_34 (P5),

Start 40:

- Found in 5 of 41 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BackstagePass\_50 (DB), Bowser\_41 (DB), Eyes\_39 (DB), MagicMan\_41 (DB), Schnabeltier\_41 (DB),

Start 42:

- Found in 5 of 41 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Babsiella\_35 (I1), Island3\_35 (I1), QueenHazel\_31 (I1), Xula\_30 (I1),

Start 43:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bobburn\_22 (singleton),

Start 44:

- Found in 5 of 41 ( 12.2% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Brujita\_35 (I1),

**Summary by clusters:**

There are 9 clusters represented in this pham: singleton, P5, I1, AJ, DB, Q, FE, DT, CV,

Info for manual annotations of cluster AJ:

- Start number 27 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster CV:

- Start number 33 was manually annotated 1 time for cluster CV.
- Start number 37 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster DB:

- Start number 27 was manually annotated 1 time for cluster DB.
- Start number 40 was manually annotated 4 times for cluster DB.

Info for manual annotations of cluster DT:

- Start number 20 was manually annotated 1 time for cluster DT.
- Start number 33 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster FE:

- Start number 28 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster I1:

- Start number 42 was manually annotated 4 times for cluster I1.
- Start number 44 was manually annotated 1 time for cluster I1.

Info for manual annotations of cluster P5:

- Start number 39 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster Q:

- Start number 31 was manually annotated 1 time for cluster Q.
- Start number 33 was manually annotated 15 times for cluster Q.

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

Gene: Amochick\_50 Start: 36955, Stop: 37152, Start Num: 33

Candidate Starts for Amochick\_50:

(Start: 33 @36955 has 18 MA's), (48, 37018),

Gene: Amymech\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Amymech\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Babsiella\_35 Start: 28713, Stop: 28880, Start Num: 42

Candidate Starts for Babsiella\_35:

(13, 28563), (21, 28629), (Start: 28 @28668 has 1 MA's), (30, 28677), (Start: 42 @28713 has 4 MA's), (Start: 44 @28725 has 1 MA's),

Gene: BackstagePass\_50 Start: 34306, Stop: 34112, Start Num: 40

Candidate Starts for BackstagePass\_50:

(34, 34321), (Start: 40 @34306 has 4 MA's), (47, 34267), (52, 34222),

Gene: Barebow\_20 Start: 15759, Stop: 15971, Start Num: 33

Candidate Starts for Barebow\_20:

(Start: 33 @15759 has 18 MA's), (38, 15774), (41, 15783), (43, 15789), (46, 15807), (55, 15894), (62, 15960),

Gene: BloominB\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for BloominB\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: BlueFeather\_20 Start: 14165, Stop: 14407, Start Num: 28

Candidate Starts for BlueFeather\_20:

(Start: 28 @14165 has 1 MA's), (32, 14177), (36, 14195),

Gene: Bobburn\_22 Start: 15584, Stop: 15763, Start Num: 43

Candidate Starts for Bobburn\_22:

(43, 15584), (45, 15599), (55, 15689), (56, 15692),

Gene: Bowser\_41 Start: 32656, Stop: 32847, Start Num: 40

Candidate Starts for Bowser\_41:

(34, 32641), (Start: 40 @32656 has 4 MA's), (52, 32740), (54, 32755), (58, 32809),

Gene: Brujita\_35 Start: 29623, Stop: 29778, Start Num: 44

Candidate Starts for Brujita\_35:

(13, 29461), (21, 29527), (30, 29575), (Start: 42 @29611 has 4 MA's), (Start: 44 @29623 has 1 MA's),

Gene: Bunker\_39 Start: 31881, Stop: 32090, Start Num: 27

Candidate Starts for Bunker\_39:

(22, 31854), (Start: 27 @31881 has 2 MA's), (61, 32055),

Gene: Daegal\_52 Start: 37533, Stop: 37730, Start Num: 33

Candidate Starts for Daegal\_52:

(Start: 33 @37533 has 18 MA's), (48, 37596),

Gene: DeepSoil15\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for DeepSoil15\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Dogfish\_34 Start: 29638, Stop: 29883, Start Num: 20

Candidate Starts for Dogfish\_34:

(Start: 20 @29638 has 1 MA's), (Start: 27 @29674 has 2 MA's), (51, 29776),

Gene: Ein37\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Ein37\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Evanesce\_49 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Evanesce\_49:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Eyes\_39 Start: 32432, Stop: 32626, Start Num: 40

Candidate Starts for Eyes\_39:

(34, 32417), (Start: 40 @32432 has 4 MA's), (52, 32516),

Gene: Forge\_48 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Forge\_48:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Gancho\_49 Start: 36672, Stop: 36869, Start Num: 33

Candidate Starts for Gancho\_49:

(Start: 33 @36672 has 18 MA's), (48, 36735),

Gene: Hadrien\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Hadrien\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: IdentityCrisis\_37 Start: 27479, Stop: 27703, Start Num: 27

Candidate Starts for IdentityCrisis\_37:

(Start: 27 @27479 has 2 MA's),

Gene: Island3\_35 Start: 29611, Stop: 29778, Start Num: 42

Candidate Starts for Island3\_35:

(13, 29461), (21, 29527), (30, 29575), (Start: 42 @29611 has 4 MA's), (Start: 44 @29623 has 1 MA's),

Gene: Kinbote\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Kinbote\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: LilHazelnut\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for LilHazelnut\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Luke\_50 Start: 36904, Stop: 37101, Start Num: 33

Candidate Starts for Luke\_50:

(Start: 33 @36904 has 18 MA's), (48, 36967),

Gene: MagicMan\_41 Start: 32979, Stop: 33173, Start Num: 40

Candidate Starts for MagicMan\_41:

(34, 32964), (Start: 40 @32979 has 4 MA's), (52, 33063),

Gene: NovoPizza\_50 Start: 37432, Stop: 37641, Start Num: 31

Candidate Starts for NovoPizza\_50:

(1, 37132), (2, 37138), (3, 37159), (4, 37204), (5, 37207), (6, 37234), (8, 37267), (9, 37273), (10, 37279), (11, 37285), (12, 37309), (14, 37318), (15, 37333), (16, 37339), (17, 37348), (18, 37351), (25, 37411), (Start: 31 @37432 has 1 MA's), (Start: 33 @37441 has 18 MA's), (45, 37477), (52, 37540), (54, 37555),

Gene: Nyceirae\_38 Start: 30354, Stop: 30581, Start Num: 33

Candidate Starts for Nyceirae\_38:

(23, 30303), (26, 30327), (Start: 33 @30354 has 18 MA's), (35, 30363), (53, 30477), (57, 30495),

Gene: OBUpride\_50 Start: 36945, Stop: 37142, Start Num: 33

Candidate Starts for OBUpride\_50:

(Start: 33 @36945 has 18 MA's), (48, 37008), (50, 37017), (51, 37032),

Gene: Obliviate\_39 Start: 31330, Stop: 31524, Start Num: 37

Candidate Starts for Obliviate\_39:

(Start: 37 @31330 has 3 MA's),

Gene: Petra\_40 Start: 31689, Stop: 31883, Start Num: 37

Candidate Starts for Petra\_40:

(Start: 37 @31689 has 3 MA's),

Gene: Phayonce\_34 Start: 29517, Stop: 29735, Start Num: 39

Candidate Starts for Phayonce\_34:

(29, 29487), (Start: 39 @29517 has 1 MA's), (54, 29625),

Gene: QueenHazel\_31 Start: 27647, Stop: 27814, Start Num: 42

Candidate Starts for QueenHazel\_31:

(13, 27497), (21, 27563), (30, 27611), (Start: 42 @27647 has 4 MA's), (Start: 44 @27659 has 1 MA's),

Gene: Schnabeltier\_41 Start: 32611, Stop: 32805, Start Num: 40

Candidate Starts for Schnabeltier\_41:

(Start: 40 @32611 has 4 MA's), (47, 32650), (52, 32695),

Gene: Ubuntu\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Ubuntu\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: UmaThurman\_37 Start: 31748, Stop: 31954, Start Num: 33

Candidate Starts for UmaThurman\_37:

(7, 31565), (15, 31640), (19, 31670), (24, 31712), (Start: 33 @31748 has 18 MA's), (Start: 37 @31760 has 3 MA's), (49, 31826), (59, 31934), (60, 31937),

Gene: WST1\_38 Start: 27336, Stop: 27560, Start Num: 27

Candidate Starts for WST1\_38:

(Start: 27 @27336 has 2 MA's),

Gene: Webster2\_50 Start: 36949, Stop: 37146, Start Num: 33

Candidate Starts for Webster2\_50:

(Start: 33 @36949 has 18 MA's), (48, 37012),

Gene: Xula\_30 Start: 27171, Stop: 27338, Start Num: 42

Candidate Starts for Xula\_30:

(13, 27021), (21, 27087), (30, 27135), (Start: 42 @27171 has 4 MA's), (Start: 44 @27183 has 1 MA's),

Gene: ZAYM\_43 Start: 32247, Stop: 32456, Start Num: 27

Candidate Starts for ZAYM\_43:

(22, 32220), (Start: 27 @32247 has 2 MA's),

Gene: Zarbodnamra\_42 Start: 32451, Stop: 32645, Start Num: 37

Candidate Starts for Zarbodnamra\_42:

(Start: 37 @32451 has 3 MA's),