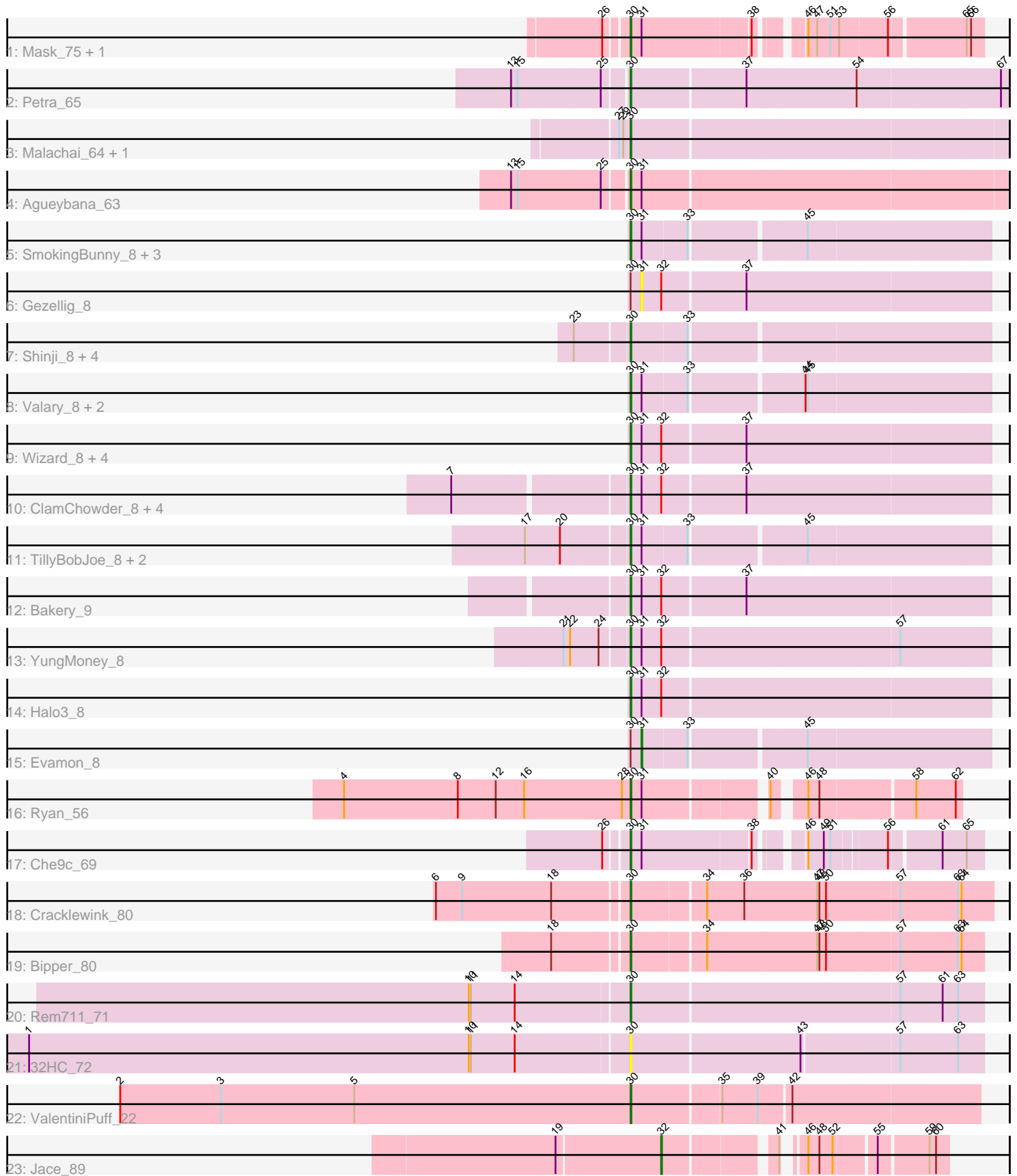


# Pham 2072



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 2072 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2072 has 44 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mask\_75, Sejanus\_74
- Track 2 : Petra\_65
- Track 3 : Malachai\_64, Begonia\_64
- Track 4 : Agueybana\_63
- Track 5 : SmokingBunny\_8, Salvador\_8, Portcullis\_8, Togo\_8
- Track 6 : Gezellig\_8
- Track 7 : Shinji\_8, Twister6\_8, Mutzi\_8, Nubi\_8, Danyall\_8
- Track 8 : Valary\_8, Arri\_8, RogerDodger\_8
- Track 9 : Wizard\_8, Fireball\_8, VanDeWege\_8, PullumCavea\_8, Phlop\_8
- Track 10 : ClamChowder\_8, Barb\_8, Fugax\_8, PinkCoffee\_8, KimmyK\_8
- Track 11 : TillyBobJoe\_8, Savbucketdawg\_8, Jambalaya\_8
- Track 12 : Bakery\_9
- Track 13 : YungMoney\_8
- Track 14 : Halo3\_8
- Track 15 : Evamon\_8
- Track 16 : Ryan\_56
- Track 17 : Che9c\_69
- Track 18 : Cracklewink\_80
- Track 19 : Bipper\_80
- Track 20 : Rem711\_71
- Track 21 : 32HC\_72
- Track 22 : ValentiniPuff\_22
- Track 23 : Jace\_89

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

The start number called the most often in the published annotations is 30, it was called in 39 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 32HC\_72, Agueybana\_63, Arri\_8, Bakery\_9, Barb\_8, Begonia\_64, Bipper\_80, Che9c\_69, ClamChowder\_8, Cracklewink\_80, Danyall\_8, Fireball\_8, Fugax\_8, Halo3\_8, Jambalaya\_8, KimmyK\_8, Malachai\_64, Mask\_75, Mutzi\_8, Nubi\_8, Petra\_65, Phlop\_8, PinkCoffee\_8, Portcullis\_8, PullumCavea\_8, Rem711\_71,

RogerDodger\_8, Ryan\_56, Salvador\_8, Savbucketdawg\_8, Sejanus\_74, Shinji\_8, SmokingBunny\_8, TillyBobJoe\_8, Togo\_8, Twister6\_8, Valary\_8, ValentiniPuff\_22, VanDeWege\_8, Wizard\_8, YungMoney\_8,

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

- Evamon\_8, Gezellig\_8,

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

- Jace\_89,

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

Start 30:

- Found in 43 of 44 ( 97.7% ) of genes in pham
- Manual Annotations of this start: 39 of 41
- Called 95.3% of time when present
- Phage (with cluster) where this start called: 32HC\_72 (Z), Agueybana\_63 (CZ1), Arri\_8 (DC1), Bakery\_9 (DC1), Barb\_8 (DC1), Begonia\_64 (CV), Bipper\_80 (Y), Che9c\_69 (I2), ClamChowder\_8 (DC1), Cracklewink\_80 (Y), Danyall\_8 (DC1), Fireball\_8 (DC1), Fugax\_8 (DC1), Halo3\_8 (DC1), Jambalaya\_8 (DC1), KimmyK\_8 (DC1), Malachai\_64 (CV), Mask\_75 (AD), Mutzi\_8 (DC1), Nubi\_8 (DC1), Petra\_65 (CV), Phlop\_8 (DC1), PinkCoffee\_8 (DC1), Portcullis\_8 (DC1), PullumCavea\_8 (DC1), Rem711\_71 (Z), RogerDodger\_8 (DC1), Ryan\_56 (FF), Salvador\_8 (DC1), Savbucketdawg\_8 (DC1), Sejanus\_74 (AD), Shinji\_8 (DC1), SmokingBunny\_8 (DC1), TillyBobJoe\_8 (DC1), Togo\_8 (DC1), Twister6\_8 (DC1), Valary\_8 (DC1), ValentiniPuff\_22 (singleton), VanDeWege\_8 (DC1), Wizard\_8 (DC1), YungMoney\_8 (DC1),

Start 31:

- Found in 30 of 44 ( 68.2% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Evamon\_8 (DC1), Gezellig\_8 (DC1),

Start 32:

- Found in 15 of 44 ( 34.1% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Jace\_89 (singleton),

### **Summary by clusters:**

There are 9 clusters represented in this pham: singleton, I2, AD, CZ1, FF, Y, Z, CV, DC1,

Info for manual annotations of cluster AD:

- Start number 30 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster CV:

- Start number 30 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CZ1:

- Start number 30 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster DC1:

- Start number 30 was manually annotated 27 times for cluster DC1.
- Start number 31 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster FF:

- Start number 30 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster I2:

- Start number 30 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster Y:

- Start number 30 was manually annotated 2 times for cluster Y.

Info for manual annotations of cluster Z:

- Start number 30 was manually annotated 1 time for cluster Z.

### **Gene Information:**

Gene: 32HC\_72 Start: 44118, Stop: 44579, Start Num: 30

Candidate Starts for 32HC\_72:

(1, 43305), (10, 43908), (11, 43911), (14, 43971), (Start: 30 @44118 has 39 MA's), (43, 44343), (57, 44469), (63, 44547),

Gene: Agueybana\_63 Start: 43155, Stop: 43649, Start Num: 30

Candidate Starts for Agueybana\_63:

(13, 43005), (15, 43014), (25, 43125), (Start: 30 @43155 has 39 MA's), (Start: 31 @43170 has 1 MA's),

Gene: Arri\_8 Start: 3914, Stop: 4381, Start Num: 30

Candidate Starts for Arri\_8:

(Start: 30 @3914 has 39 MA's), (Start: 31 @3929 has 1 MA's), (33, 3989), (44, 4133), (45, 4136),

Gene: Bakery\_9 Start: 4124, Stop: 4600, Start Num: 30

Candidate Starts for Bakery\_9:

(Start: 30 @4124 has 39 MA's), (Start: 31 @4139 has 1 MA's), (Start: 32 @4166 has 1 MA's), (37, 4277),

Gene: Barb\_8 Start: 4019, Stop: 4495, Start Num: 30

Candidate Starts for Barb\_8:

(7, 3797), (Start: 30 @4019 has 39 MA's), (Start: 31 @4034 has 1 MA's), (Start: 32 @4061 has 1 MA's), (37, 4172),

Gene: Begonia\_64 Start: 43408, Stop: 43905, Start Num: 30

Candidate Starts for Begonia\_64:

(27, 43393), (29, 43399), (Start: 30 @43408 has 39 MA's),

Gene: Bipper\_80 Start: 52933, Stop: 53394, Start Num: 30

Candidate Starts for Bipper\_80:

(18, 52840), (Start: 30 @52933 has 39 MA's), (34, 53029), (47, 53179), (48, 53182), (50, 53191), (57, 53287), (63, 53365), (64, 53368),

Gene: Che9c\_69 Start: 48944, Stop: 49369, Start Num: 30

Candidate Starts for Che9c\_69:

(26, 48917), (Start: 30 @48944 has 39 MA's), (Start: 31 @48959 has 1 MA's), (38, 49103), (46, 49151), (49, 49172), (51, 49181), (56, 49250), (61, 49313), (65, 49346),

Gene: ClamChowder\_8 Start: 4019, Stop: 4495, Start Num: 30

Candidate Starts for ClamChowder\_8:

(7, 3797), (Start: 30 @4019 has 39 MA's), (Start: 31 @4034 has 1 MA's), (Start: 32 @4061 has 1 MA's), (37, 4172),

Gene: Cracklewink\_80 Start: 51970, Stop: 52446, Start Num: 30

Candidate Starts for Cracklewink\_80:

(6, 51721), (9, 51757), (18, 51877), (Start: 30 @51970 has 39 MA's), (34, 52066), (36, 52117), (47, 52216), (48, 52219), (50, 52228), (57, 52324), (63, 52402), (64, 52405),

Gene: Danyall\_8 Start: 3900, Stop: 4367, Start Num: 30

Candidate Starts for Danyall\_8:

(23, 3831), (Start: 30 @3900 has 39 MA's), (33, 3975),

Gene: Evamon\_8 Start: 3896, Stop: 4348, Start Num: 31

Candidate Starts for Evamon\_8:

(Start: 30 @3881 has 39 MA's), (Start: 31 @3896 has 1 MA's), (33, 3956), (45, 4103),

Gene: Fireball\_8 Start: 3790, Stop: 4266, Start Num: 30

Candidate Starts for Fireball\_8:

(Start: 30 @3790 has 39 MA's), (Start: 31 @3805 has 1 MA's), (Start: 32 @3832 has 1 MA's), (37, 3943),

Gene: Fugax\_8 Start: 4019, Stop: 4495, Start Num: 30

Candidate Starts for Fugax\_8:

(7, 3797), (Start: 30 @4019 has 39 MA's), (Start: 31 @4034 has 1 MA's), (Start: 32 @4061 has 1 MA's), (37, 4172),

Gene: Gezellig\_8 Start: 3805, Stop: 4266, Start Num: 31

Candidate Starts for Gezellig\_8:

(Start: 30 @3790 has 39 MA's), (Start: 31 @3805 has 1 MA's), (Start: 32 @3832 has 1 MA's), (37, 3943),

Gene: Halo3\_8 Start: 4025, Stop: 4501, Start Num: 30

Candidate Starts for Halo3\_8:

(Start: 30 @4025 has 39 MA's), (Start: 31 @4040 has 1 MA's), (Start: 32 @4067 has 1 MA's),

Gene: Jace\_89 Start: 50124, Stop: 49804, Start Num: 32

Candidate Starts for Jace\_89:

(19, 50262), (Start: 32 @50124 has 1 MA's), (41, 49989), (46, 49974), (48, 49959), (52, 49941), (55, 49893), (59, 49830), (60, 49821),

Gene: Jambalaya\_8 Start: 3711, Stop: 4178, Start Num: 30

Candidate Starts for Jambalaya\_8:

(17, 3576), (20, 3624), (Start: 30 @3711 has 39 MA's), (Start: 31 @3726 has 1 MA's), (33, 3786), (45, 3933),

Gene: KimmyK\_8 Start: 4019, Stop: 4495, Start Num: 30

Candidate Starts for KimmyK\_8:

(7, 3797), (Start: 30 @4019 has 39 MA's), (Start: 31 @4034 has 1 MA's), (Start: 32 @4061 has 1 MA's), (37, 4172),

Gene: Malachai\_64 Start: 43408, Stop: 43905, Start Num: 30

Candidate Starts for Malachai\_64:

(27, 43393), (29, 43399), (Start: 30 @43408 has 39 MA's),

Gene: Mask\_75 Start: 56488, Stop: 56919, Start Num: 30

Candidate Starts for Mask\_75:

(26, 56461), (Start: 30 @56488 has 39 MA's), (Start: 31 @56503 has 1 MA's), (38, 56647), (46, 56695), (47, 56707), (51, 56725), (53, 56737), (56, 56800), (65, 56896), (66, 56902),

Gene: Mutzi\_8 Start: 3900, Stop: 4367, Start Num: 30

Candidate Starts for Mutzi\_8:

(23, 3831), (Start: 30 @3900 has 39 MA's), (33, 3975),

Gene: Nubi\_8 Start: 3900, Stop: 4367, Start Num: 30

Candidate Starts for Nubi\_8:

(23, 3831), (Start: 30 @3900 has 39 MA's), (33, 3975),

Gene: Petra\_65 Start: 41300, Stop: 41800, Start Num: 30

Candidate Starts for Petra\_65:

(13, 41150), (15, 41159), (25, 41270), (Start: 30 @41300 has 39 MA's), (37, 41453), (54, 41600), (67, 41789),

Gene: Phlop\_8 Start: 3790, Stop: 4266, Start Num: 30

Candidate Starts for Phlop\_8:

(Start: 30 @3790 has 39 MA's), (Start: 31 @3805 has 1 MA's), (Start: 32 @3832 has 1 MA's), (37, 3943),

Gene: PinkCoffee\_8 Start: 4028, Stop: 4504, Start Num: 30

Candidate Starts for PinkCoffee\_8:

(7, 3806), (Start: 30 @4028 has 39 MA's), (Start: 31 @4043 has 1 MA's), (Start: 32 @4070 has 1 MA's), (37, 4181),

Gene: Portcullis\_8 Start: 3959, Stop: 4426, Start Num: 30

Candidate Starts for Portcullis\_8:

(Start: 30 @3959 has 39 MA's), (Start: 31 @3974 has 1 MA's), (33, 4034), (45, 4181),

Gene: PullumCavea\_8 Start: 3790, Stop: 4266, Start Num: 30

Candidate Starts for PullumCavea\_8:

(Start: 30 @3790 has 39 MA's), (Start: 31 @3805 has 1 MA's), (Start: 32 @3832 has 1 MA's), (37, 3943),

Gene: Rem711\_71 Start: 44071, Stop: 44538, Start Num: 30

Candidate Starts for Rem711\_71:

(10, 43861), (11, 43864), (14, 43924), (Start: 30 @44071 has 39 MA's), (57, 44428), (61, 44485), (63, 44506),

Gene: RogerDodger\_8 Start: 3959, Stop: 4426, Start Num: 30

Candidate Starts for RogerDodger\_8:

(Start: 30 @3959 has 39 MA's), (Start: 31 @3974 has 1 MA's), (33, 4034), (44, 4178), (45, 4181),

Gene: Ryan\_56 Start: 37153, Stop: 37548, Start Num: 30

Candidate Starts for Ryan\_56:

(4, 36763), (8, 36919), (12, 36970), (16, 37009), (28, 37141), (Start: 30 @37153 has 39 MA's), (Start: 31 @37168 has 1 MA's), (40, 37318), (46, 37351), (48, 37366), (58, 37486), (62, 37540),

Gene: Salvador\_8 Start: 3879, Stop: 4346, Start Num: 30

Candidate Starts for Salvador\_8:

(Start: 30 @3879 has 39 MA's), (Start: 31 @3894 has 1 MA's), (33, 3954), (45, 4101),

Gene: Savbucketdawg\_8 Start: 3711, Stop: 4178, Start Num: 30

Candidate Starts for Savbucketdawg\_8:

(17, 3576), (20, 3624), (Start: 30 @3711 has 39 MA's), (Start: 31 @3726 has 1 MA's), (33, 3786), (45, 3933),

Gene: Sejanus\_74 Start: 54949, Stop: 55380, Start Num: 30

Candidate Starts for Sejanus\_74:

(26, 54922), (Start: 30 @54949 has 39 MA's), (Start: 31 @54964 has 1 MA's), (38, 55108), (46, 55156), (47, 55168), (51, 55186), (53, 55198), (56, 55261), (65, 55357), (66, 55363),

Gene: Shinji\_8 Start: 3900, Stop: 4367, Start Num: 30

Candidate Starts for Shinji\_8:

(23, 3831), (Start: 30 @3900 has 39 MA's), (33, 3975),

Gene: SmokingBunny\_8 Start: 3879, Stop: 4346, Start Num: 30

Candidate Starts for SmokingBunny\_8:

(Start: 30 @3879 has 39 MA's), (Start: 31 @3894 has 1 MA's), (33, 3954), (45, 4101),

Gene: TillyBobJoe\_8 Start: 3714, Stop: 4181, Start Num: 30

Candidate Starts for TillyBobJoe\_8:

(17, 3579), (20, 3627), (Start: 30 @3714 has 39 MA's), (Start: 31 @3729 has 1 MA's), (33, 3789), (45, 3936),

Gene: Togo\_8 Start: 3879, Stop: 4346, Start Num: 30

Candidate Starts for Togo\_8:

(Start: 30 @3879 has 39 MA's), (Start: 31 @3894 has 1 MA's), (33, 3954), (45, 4101),

Gene: Twister6\_8 Start: 3811, Stop: 4278, Start Num: 30

Candidate Starts for Twister6\_8:

(23, 3742), (Start: 30 @3811 has 39 MA's), (33, 3886),

Gene: Valary\_8 Start: 3959, Stop: 4426, Start Num: 30

Candidate Starts for Valary\_8:

(Start: 30 @3959 has 39 MA's), (Start: 31 @3974 has 1 MA's), (33, 4034), (44, 4178), (45, 4181),

Gene: ValentiniPuff\_22 Start: 14817, Stop: 15275, Start Num: 30

Candidate Starts for ValentiniPuff\_22:

(2, 14118), (3, 14256), (5, 14439), (Start: 30 @14817 has 39 MA's), (35, 14934), (39, 14982), (42, 15024),

Gene: VanDeWege\_8 Start: 3836, Stop: 4312, Start Num: 30

Candidate Starts for VanDeWege\_8:

(Start: 30 @3836 has 39 MA's), (Start: 31 @3851 has 1 MA's), (Start: 32 @3878 has 1 MA's), (37, 3989),

Gene: Wizard\_8 Start: 3790, Stop: 4266, Start Num: 30

Candidate Starts for Wizard\_8:

(Start: 30 @3790 has 39 MA's), (Start: 31 @3805 has 1 MA's), (Start: 32 @3832 has 1 MA's), (37, 3943),

Gene: YungMoney\_8 Start: 4955, Stop: 5431, Start Num: 30

Candidate Starts for YungMoney\_8:

(21, 4874), (22, 4883), (24, 4919), (Start: 30 @4955 has 39 MA's), (Start: 31 @4970 has 1 MA's), (Start: 32 @4997 has 1 MA's), (57, 5309),