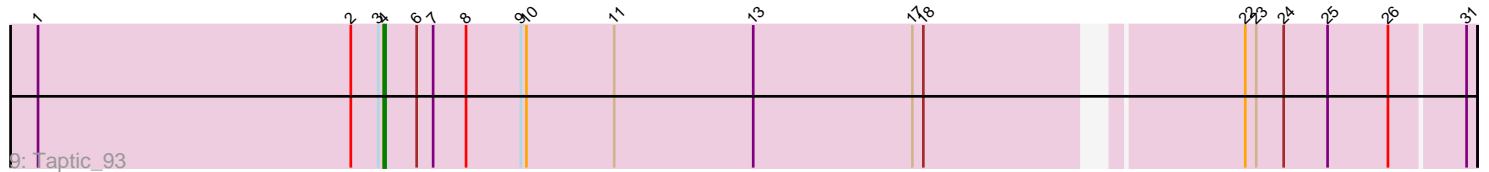
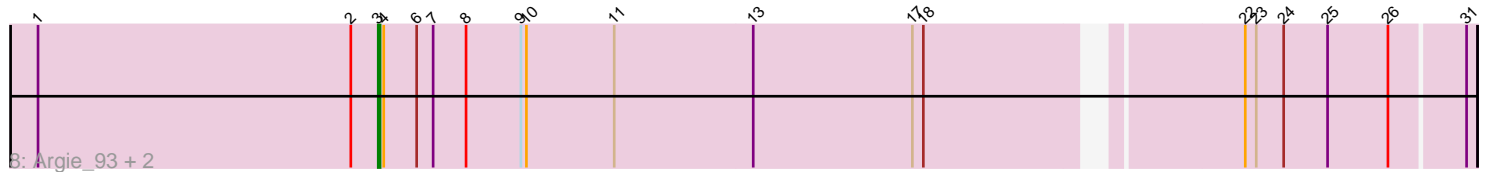
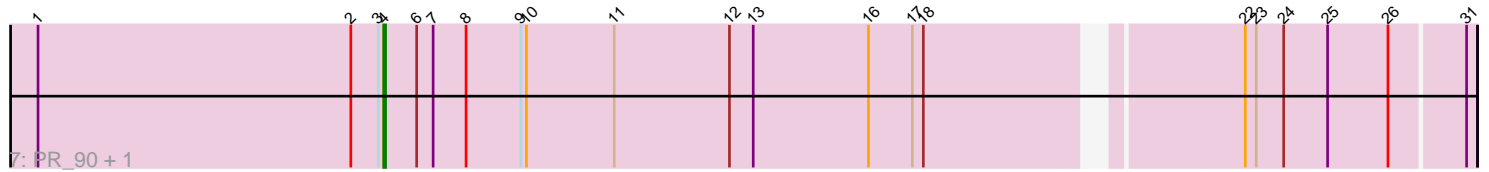
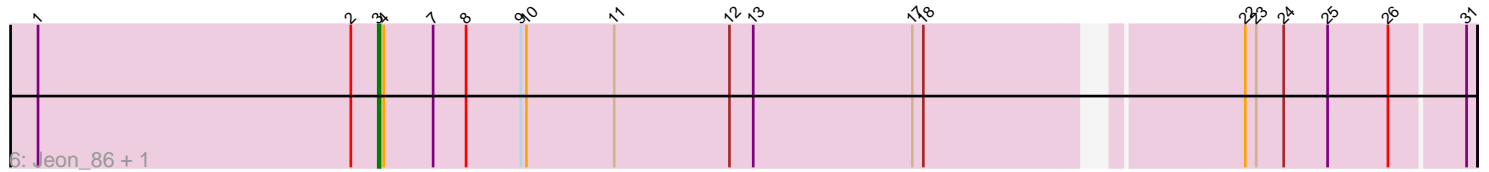
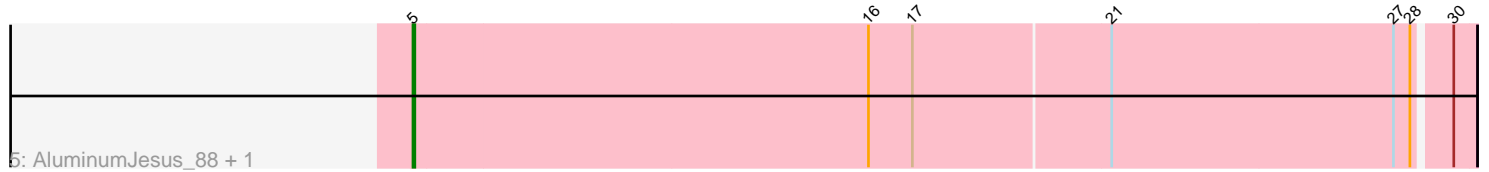
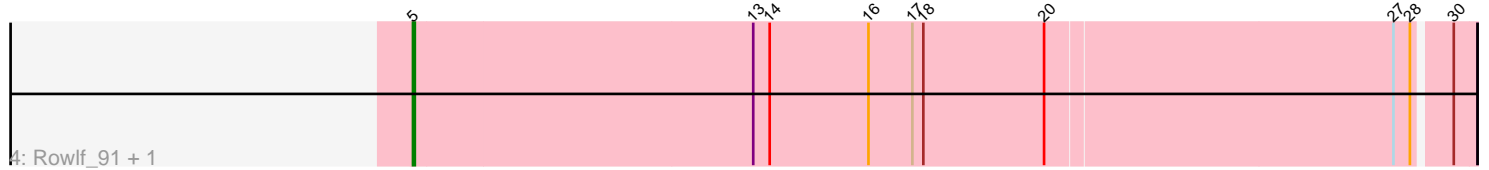
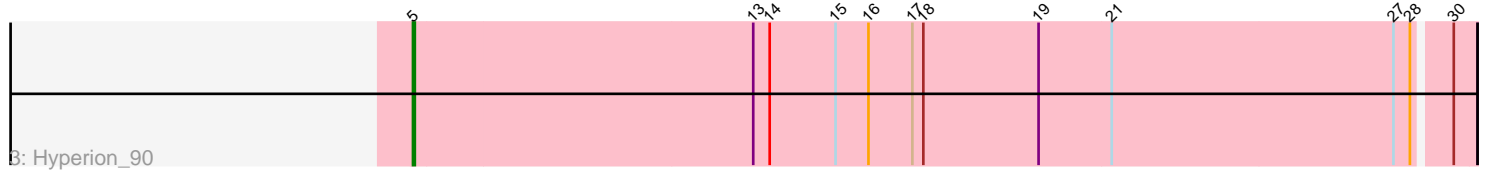
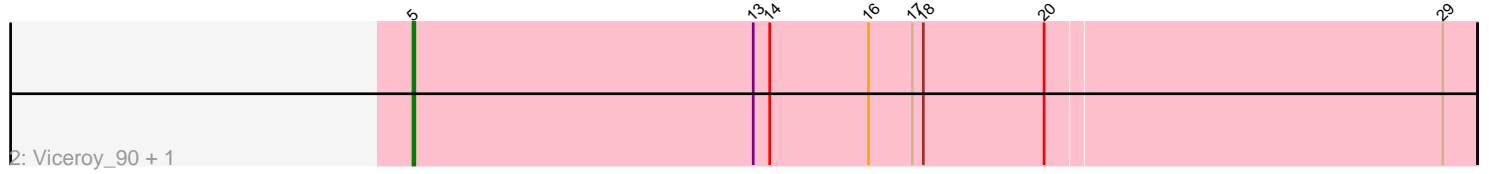
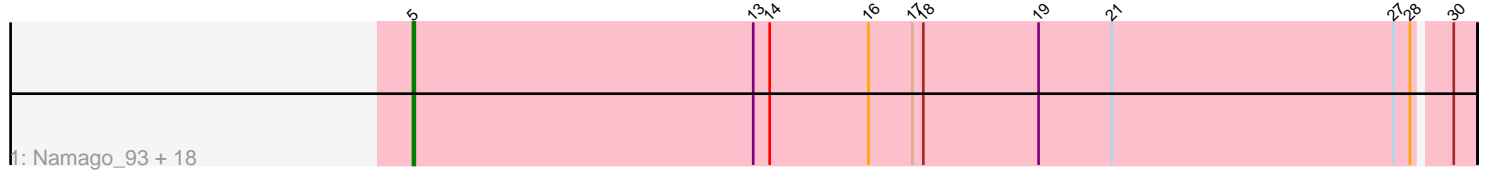


# Pham 2962



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 2962 Report

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

Pham number 2962 has 34 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Namago\_93, Kyva\_95, Judebell\_95, Lonelysoil\_89, DonaldDuck\_93, Zagie\_93, SallyK\_93, Casend\_92, Grassboy\_96, Wayne3\_93, Sillytadpoles\_94, StrawberryJamm\_97, Zhafia\_97, Teehee\_92, Phabia\_91, Llemily\_93, Jehoshaphat\_93, Wheelie\_91, Mashley\_90
- Track 2 : Viceroy\_90, Quammi\_91
- Track 3 : Hyperion\_90
- Track 4 : Rowlf\_91, Rudy\_89
- Track 5 : AluminumJesus\_88, Gazebo\_90
- Track 6 : Jeon\_86, GodPhather\_92
- Track 7 : PR\_90, D12\_89
- Track 8 : Argie\_93, Megabear\_90, Cepens\_92
- Track 9 : Taptic\_93

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

The start number called the most often in the published annotations is 5, it was called in 19 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AluminumJesus\_88, Casend\_92, DonaldDuck\_93, Gazebo\_90, Grassboy\_96, Hyperion\_90, Jehoshaphat\_93, Judebell\_95, Kyva\_95, Llemily\_93, Lonelysoil\_89, Mashley\_90, Namago\_93, Phabia\_91, Quammi\_91, Rowlf\_91, Rudy\_89, SallyK\_93, Sillytadpoles\_94, StrawberryJamm\_97, Teehee\_92, Viceroy\_90, Wayne3\_93, Wheelie\_91, Zagie\_93, Zhafia\_97,

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

- 

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

- Argie\_93, Cepens\_92, D12\_89, GodPhather\_92, Jeon\_86, Megabear\_90, PR\_90, Taptic\_93,

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

#### Start 3:

- Found in 8 of 34 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 5 of 27
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Argie\_93 (W), Cepens\_92 (W), GodPhather\_92 (W), Jeon\_86 (W), Megabear\_90 (W),

#### Start 4:

- Found in 8 of 34 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 3 of 27
- Called 37.5% of time when present
- Phage (with cluster) where this start called: D12\_89 (W), PR\_90 (W), Taptic\_93 (W),

#### Start 5:

- Found in 26 of 34 ( 76.5% ) of genes in pham
- Manual Annotations of this start: 19 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AluminumJesus\_88 (EG), Casend\_92 (EG), DonaldDuck\_93 (EG), Gazebo\_90 (EG), Grassboy\_96 (EG), Hyperion\_90 (EG), Jehoshaphat\_93 (EG), Judebell\_95 (EG), Kyva\_95 (EG), Llemily\_93 (EG), Lonelysoil\_89 (EG), Mashley\_90 (EG), Namago\_93 (EG), Phabia\_91 (EG), Quammi\_91 (EG), Rowlf\_91 (EG), Rudy\_89 (EG), SallyK\_93 (EG), Sillytadpoles\_94 (EG), StrawberryJamm\_97 (EG), Teehee\_92 (EG), Viceroy\_90 (EG), Wayne3\_93 (EG), Wheelie\_91 (EG), Zagie\_93 (EG), Zhafia\_97 (EG),

### Summary by clusters:

There are 2 clusters represented in this pham: EG, W,

Info for manual annotations of cluster EG:

- Start number 5 was manually annotated 19 times for cluster EG.

Info for manual annotations of cluster W:

- Start number 3 was manually annotated 5 times for cluster W.
- Start number 4 was manually annotated 3 times for cluster W.

### Gene Information:

Gene: AluminumJesus\_88 Start: 56323, Stop: 55757, Start Num: 5

Candidate Starts for AluminumJesus\_88:

(Start: 5 @56323 has 19 MA's), (16, 56077), (17, 56053), (21, 55948), (27, 55795), (28, 55786), (30, 55768),

Gene: Argie\_93 Start: 60909, Stop: 61481, Start Num: 3

Candidate Starts for Argie\_93:

(1, 60723), (2, 60894), (Start: 3 @60909 has 5 MA's), (Start: 4 @60912 has 3 MA's), (6, 60930), (7, 60939), (8, 60957), (9, 60987), (10, 60990), (11, 61038), (13, 61113), (17, 61200), (18, 61206), (22, 61359), (23, 61365), (24, 61380), (25, 61404), (26, 61437), (31, 61476),

Gene: Casend\_92 Start: 57528, Stop: 56959, Start Num: 5

Candidate Starts for Casend\_92:

(Start: 5 @57528 has 19 MA's), (13, 57345), (14, 57336), (16, 57282), (17, 57258), (18, 57252), (19, 57189), (21, 57150), (27, 56997), (28, 56988), (30, 56970),

Gene: Cepens\_92 Start: 60018, Stop: 60590, Start Num: 3

Candidate Starts for Cepens\_92:

(1, 59832), (2, 60003), (Start: 3 @60018 has 5 MA's), (Start: 4 @60021 has 3 MA's), (6, 60039), (7, 60048), (8, 60066), (9, 60096), (10, 60099), (11, 60147), (13, 60222), (17, 60309), (18, 60315), (22, 60468), (23, 60474), (24, 60489), (25, 60513), (26, 60546), (31, 60585),

Gene: D12\_89 Start: 60655, Stop: 61224, Start Num: 4

Candidate Starts for D12\_89:

(1, 60466), (2, 60637), (Start: 3 @60652 has 5 MA's), (Start: 4 @60655 has 3 MA's), (6, 60673), (7, 60682), (8, 60700), (9, 60730), (10, 60733), (11, 60781), (12, 60844), (13, 60856), (16, 60919), (17, 60943), (18, 60949), (22, 61102), (23, 61108), (24, 61123), (25, 61147), (26, 61180), (31, 61219),

Gene: DonaldDuck\_93 Start: 56928, Stop: 56359, Start Num: 5

Candidate Starts for DonaldDuck\_93:

(Start: 5 @56928 has 19 MA's), (13, 56745), (14, 56736), (16, 56682), (17, 56658), (18, 56652), (19, 56589), (21, 56550), (27, 56397), (28, 56388), (30, 56370),

Gene: Gazebo\_90 Start: 56901, Stop: 56335, Start Num: 5

Candidate Starts for Gazebo\_90:

(Start: 5 @56901 has 19 MA's), (16, 56655), (17, 56631), (21, 56526), (27, 56373), (28, 56364), (30, 56346),

Gene: GodPhather\_92 Start: 60777, Stop: 61349, Start Num: 3

Candidate Starts for GodPhather\_92:

(1, 60591), (2, 60762), (Start: 3 @60777 has 5 MA's), (Start: 4 @60780 has 3 MA's), (7, 60807), (8, 60825), (9, 60855), (10, 60858), (11, 60906), (12, 60969), (13, 60981), (17, 61068), (18, 61074), (22, 61227), (23, 61233), (24, 61248), (25, 61272), (26, 61305), (31, 61344),

Gene: Grassboy\_96 Start: 57829, Stop: 57260, Start Num: 5

Candidate Starts for Grassboy\_96:

(Start: 5 @57829 has 19 MA's), (13, 57646), (14, 57637), (16, 57583), (17, 57559), (18, 57553), (19, 57490), (21, 57451), (27, 57298), (28, 57289), (30, 57271),

Gene: Hyperion\_90 Start: 56966, Stop: 56397, Start Num: 5

Candidate Starts for Hyperion\_90:

(Start: 5 @56966 has 19 MA's), (13, 56783), (14, 56774), (15, 56738), (16, 56720), (17, 56696), (18, 56690), (19, 56627), (21, 56588), (27, 56435), (28, 56426), (30, 56408),

Gene: Jehoshaphat\_93 Start: 57562, Stop: 56993, Start Num: 5

Candidate Starts for Jehoshaphat\_93:

(Start: 5 @57562 has 19 MA's), (13, 57379), (14, 57370), (16, 57316), (17, 57292), (18, 57286), (19, 57223), (21, 57184), (27, 57031), (28, 57022), (30, 57004),

Gene: Jeon\_86 Start: 60270, Stop: 60842, Start Num: 3

Candidate Starts for Jeon\_86:

(1, 60084), (2, 60255), (Start: 3 @60270 has 5 MA's), (Start: 4 @60273 has 3 MA's), (7, 60300), (8, 60318), (9, 60348), (10, 60351), (11, 60399), (12, 60462), (13, 60474), (17, 60561), (18, 60567), (22, 60720), (23, 60726), (24, 60741), (25, 60765), (26, 60798), (31, 60837),

Gene: Judebell\_95 Start: 56960, Stop: 56391, Start Num: 5

Candidate Starts for Judebell\_95:

(Start: 5 @56960 has 19 MA's), (13, 56777), (14, 56768), (16, 56714), (17, 56690), (18, 56684), (19, 56621), (21, 56582), (27, 56429), (28, 56420), (30, 56402),

Gene: Kyva\_95 Start: 57853, Stop: 57284, Start Num: 5

Candidate Starts for Kyva\_95:

(Start: 5 @57853 has 19 MA's), (13, 57670), (14, 57661), (16, 57607), (17, 57583), (18, 57577), (19, 57514), (21, 57475), (27, 57322), (28, 57313), (30, 57295),

Gene: Llemily\_93 Start: 56623, Stop: 56054, Start Num: 5

Candidate Starts for Llemily\_93:

(Start: 5 @56623 has 19 MA's), (13, 56440), (14, 56431), (16, 56377), (17, 56353), (18, 56347), (19, 56284), (21, 56245), (27, 56092), (28, 56083), (30, 56065),

Gene: Lonelysoil\_89 Start: 56383, Stop: 55814, Start Num: 5

Candidate Starts for Lonelysoil\_89:

(Start: 5 @56383 has 19 MA's), (13, 56200), (14, 56191), (16, 56137), (17, 56113), (18, 56107), (19, 56044), (21, 56005), (27, 55852), (28, 55843), (30, 55825),

Gene: Mashley\_90 Start: 57055, Stop: 56486, Start Num: 5

Candidate Starts for Mashley\_90:

(Start: 5 @57055 has 19 MA's), (13, 56872), (14, 56863), (16, 56809), (17, 56785), (18, 56779), (19, 56716), (21, 56677), (27, 56524), (28, 56515), (30, 56497),

Gene: Megabear\_90 Start: 59941, Stop: 60513, Start Num: 3

Candidate Starts for Megabear\_90:

(1, 59755), (2, 59926), (Start: 3 @59941 has 5 MA's), (Start: 4 @59944 has 3 MA's), (6, 59962), (7, 59971), (8, 59989), (9, 60019), (10, 60022), (11, 60070), (13, 60145), (17, 60232), (18, 60238), (22, 60391), (23, 60397), (24, 60412), (25, 60436), (26, 60469), (31, 60508),

Gene: Namago\_93 Start: 57109, Stop: 56540, Start Num: 5

Candidate Starts for Namago\_93:

(Start: 5 @57109 has 19 MA's), (13, 56926), (14, 56917), (16, 56863), (17, 56839), (18, 56833), (19, 56770), (21, 56731), (27, 56578), (28, 56569), (30, 56551),

Gene: PR\_90 Start: 60632, Stop: 61201, Start Num: 4

Candidate Starts for PR\_90:

(1, 60443), (2, 60614), (Start: 3 @60629 has 5 MA's), (Start: 4 @60632 has 3 MA's), (6, 60650), (7, 60659), (8, 60677), (9, 60707), (10, 60710), (11, 60758), (12, 60821), (13, 60833), (16, 60896), (17, 60920), (18, 60926), (22, 61079), (23, 61085), (24, 61100), (25, 61124), (26, 61157), (31, 61196),

Gene: Phabia\_91 Start: 56960, Stop: 56391, Start Num: 5

Candidate Starts for Phabia\_91:

(Start: 5 @56960 has 19 MA's), (13, 56777), (14, 56768), (16, 56714), (17, 56690), (18, 56684), (19, 56621), (21, 56582), (27, 56429), (28, 56420), (30, 56402),

Gene: Quammi\_91 Start: 56905, Stop: 56333, Start Num: 5

Candidate Starts for Quammi\_91:

(Start: 5 @56905 has 19 MA's), (13, 56722), (14, 56713), (16, 56659), (17, 56635), (18, 56629), (20, 56563), (29, 56350),

Gene: Rowlf\_91 Start: 56773, Stop: 56207, Start Num: 5

Candidate Starts for Rowlf\_91:

(Start: 5 @56773 has 19 MA's), (13, 56590), (14, 56581), (16, 56527), (17, 56503), (18, 56497), (20, 56431), (27, 56245), (28, 56236), (30, 56218),

Gene: Rudy\_89 Start: 56771, Stop: 56205, Start Num: 5

Candidate Starts for Rudy\_89:

(Start: 5 @56771 has 19 MA's), (13, 56588), (14, 56579), (16, 56525), (17, 56501), (18, 56495), (20, 56429), (27, 56243), (28, 56234), (30, 56216),

Gene: SallyK\_93 Start: 57926, Stop: 57357, Start Num: 5

Candidate Starts for SallyK\_93:

(Start: 5 @57926 has 19 MA's), (13, 57743), (14, 57734), (16, 57680), (17, 57656), (18, 57650), (19, 57587), (21, 57548), (27, 57395), (28, 57386), (30, 57368),

Gene: Sillytadpoles\_94 Start: 56611, Stop: 56042, Start Num: 5

Candidate Starts for Sillytadpoles\_94:

(Start: 5 @56611 has 19 MA's), (13, 56428), (14, 56419), (16, 56365), (17, 56341), (18, 56335), (19, 56272), (21, 56233), (27, 56080), (28, 56071), (30, 56053),

Gene: StrawberryJamm\_97 Start: 56880, Stop: 56311, Start Num: 5

Candidate Starts for StrawberryJamm\_97:

(Start: 5 @56880 has 19 MA's), (13, 56697), (14, 56688), (16, 56634), (17, 56610), (18, 56604), (19, 56541), (21, 56502), (27, 56349), (28, 56340), (30, 56322),

Gene: Taptic\_93 Start: 60338, Stop: 60907, Start Num: 4

Candidate Starts for Taptic\_93:

(1, 60149), (2, 60320), (Start: 3 @60335 has 5 MA's), (Start: 4 @60338 has 3 MA's), (6, 60356), (7, 60365), (8, 60383), (9, 60413), (10, 60416), (11, 60464), (13, 60539), (17, 60626), (18, 60632), (22, 60785), (23, 60791), (24, 60806), (25, 60830), (26, 60863), (31, 60902),

Gene: Teehee\_92 Start: 57559, Stop: 56990, Start Num: 5

Candidate Starts for Teehee\_92:

(Start: 5 @57559 has 19 MA's), (13, 57376), (14, 57367), (16, 57313), (17, 57289), (18, 57283), (19, 57220), (21, 57181), (27, 57028), (28, 57019), (30, 57001),

Gene: Viceroy\_90 Start: 56726, Stop: 56154, Start Num: 5

Candidate Starts for Viceroy\_90:

(Start: 5 @56726 has 19 MA's), (13, 56543), (14, 56534), (16, 56480), (17, 56456), (18, 56450), (20, 56384), (29, 56171),

Gene: Wayne3\_93 Start: 57529, Stop: 56960, Start Num: 5

Candidate Starts for Wayne3\_93:

(Start: 5 @57529 has 19 MA's), (13, 57346), (14, 57337), (16, 57283), (17, 57259), (18, 57253), (19, 57190), (21, 57151), (27, 56998), (28, 56989), (30, 56971),

Gene: Wheelie\_91 Start: 56850, Stop: 56281, Start Num: 5

Candidate Starts for Wheelie\_91:

(Start: 5 @56850 has 19 MA's), (13, 56667), (14, 56658), (16, 56604), (17, 56580), (18, 56574), (19, 56511), (21, 56472), (27, 56319), (28, 56310), (30, 56292),

Gene: Zagie\_93 Start: 57371, Stop: 56802, Start Num: 5

Candidate Starts for Zagie\_93:

(Start: 5 @57371 has 19 MA's), (13, 57188), (14, 57179), (16, 57125), (17, 57101), (18, 57095), (19, 57032), (21, 56993), (27, 56840), (28, 56831), (30, 56813),

Gene: Zhafia\_97 Start: 57405, Stop: 56836, Start Num: 5

Candidate Starts for Zhafia\_97:

(Start: 5 @57405 has 19 MA's), (13, 57222), (14, 57213), (16, 57159), (17, 57135), (18, 57129), (19, 57066), (21, 57027), (27, 56874), (28, 56865), (30, 56847),