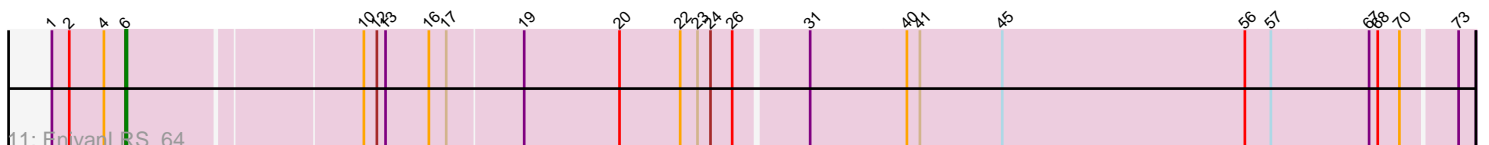
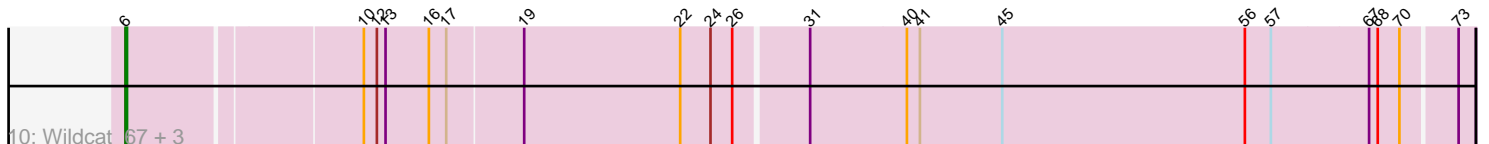
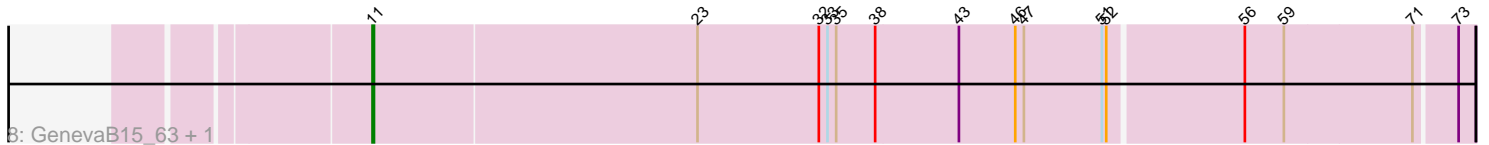
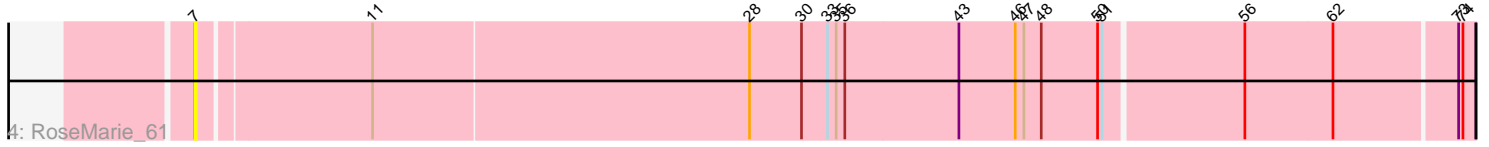
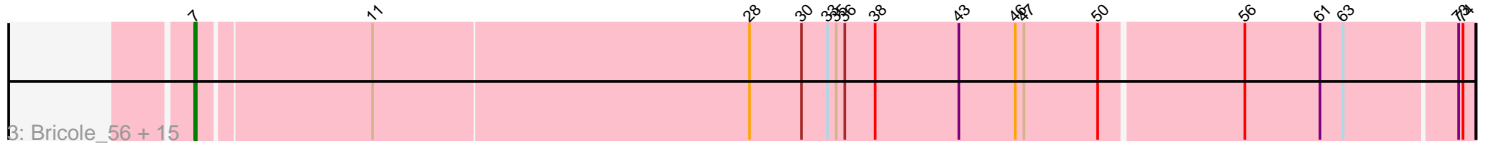
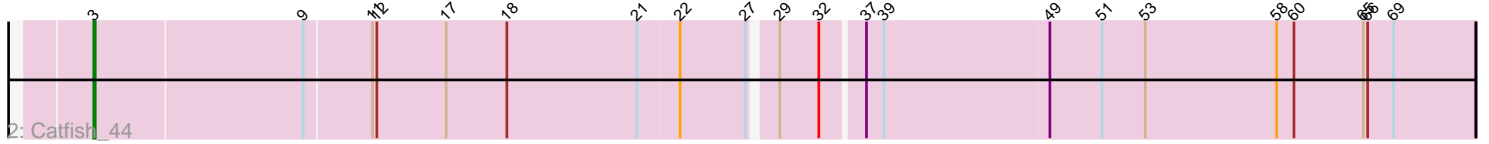
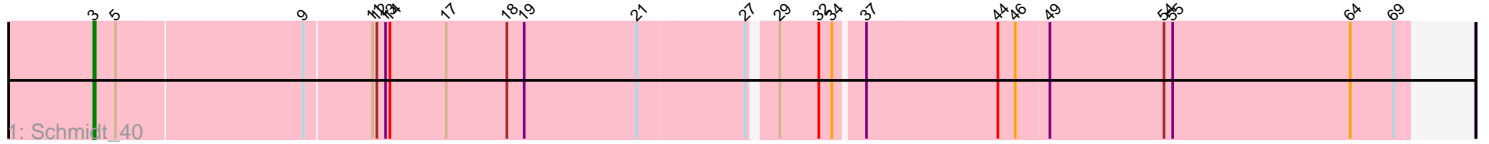


Pham 294952



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 294952 Report

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

Pham number 294952 has 32 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Schmidt_40
- Track 2 : Catfish_44
- Track 3 : Bricole_56, Dulcita_57, Glaske16_57, Bongo_56, LilhomieP_55, FreakyGoo_57, Diminimus_57, Skinny_58, IPhane7_56, KleverKiS_57, TpudiCK_58, SlimJimmy_55, PegLeg_56, Izel_57, Auspice_56, TyDawg_56
- Track 4 : RoseMarie_61
- Track 5 : Reindeer_58
- Track 6 : MrMagoo_65, Estes_64, GardenSalsa_64
- Track 7 : Rey_63
- Track 8 : GenevaB15_63, Aziz_62
- Track 9 : Nanosmite_61
- Track 10 : Wildcat_67, MaryV_67, Cosmo_68, Azrael100_67
- Track 11 : EniyanLRS_64

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

The start number called the most often in the published annotations is 7, it was called in 16 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice_56, Bongo_56, Bricole_56, Diminimus_57, Dulcita_57, FreakyGoo_57, Glaske16_57, IPhane7_56, Izel_57, KleverKiS_57, LilhomieP_55, Nanosmite_61, PegLeg_56, Reindeer_58, RoseMarie_61, Skinny_58, SlimJimmy_55, TpudiCK_58, TyDawg_56,

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

- Rey_63,

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

- Aziz_62, Azrael100_67, Catfish_44, Cosmo_68, EniyanLRS_64, Estes_64, GardenSalsa_64, GenevaB15_63, MaryV_67, MrMagoo_65, Schmidt_40, Wildcat_67,

Summary by start number:

Start 3:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish_44 (CU5), Schmidt_40 (CU4),

Start 6:

- Found in 6 of 32 (18.8%) of genes in pham
- Manual Annotations of this start: 6 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_67 (V), Cosmo_68 (V), EniyanLRS_64 (V), MaryV_67 (V), Rey_63 (M2), Wildcat_67 (V),

Start 7:

- Found in 20 of 32 (62.5%) of genes in pham
- Manual Annotations of this start: 16 of 29
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Auspice_56 (M1), Bongo_56 (M1), Bricole_56 (M1), Diminimus_57 (M1), Dulcita_57 (M1), FreakyGoo_57 (M1), Glaske16_57 (M1), IPhane7_56 (M1), Izel_57 (M1), KleverKiS_57 (M1), LilhomieP_55 (M1), Nanosmite_61 (M3), PegLeg_56 (M1), Reindeer_58 (M1), RoseMarie_61 (M1), Skinny_58 (M1), SlimJimmy_55 (M1), TpudiCK_58 (M1), TyDawg_56 (M1),

Start 11:

- Found in 27 of 32 (84.4%) of genes in pham
- Manual Annotations of this start: 5 of 29
- Called 18.5% of time when present
- Phage (with cluster) where this start called: Aziz_62 (M2), Estes_64 (M2), GardenSalsa_64 (M2), GenevaB15_63 (M2), MrMagoo_65 (M2),

Summary by clusters:

There are 6 clusters represented in this pham: CU5, CU4, V, M1, M3, M2,

Info for manual annotations of cluster CU4:

- Start number 3 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 3 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster M1:

- Start number 7 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 6 was manually annotated 1 time for cluster M2.
- Start number 11 was manually annotated 5 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 7 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 6 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Auspice_56 Start: 39488, Stop: 40348, Start Num: 7

Candidate Starts for Auspice_56:

(Start: 7 @39488 has 16 MA's), (Start: 11 @39602 has 5 MA's), (28, 39860), (30, 39896), (33, 39914), (35, 39920), (36, 39926), (38, 39947), (43, 40004), (46, 40043), (47, 40049), (50, 40100), (56, 40196), (61, 40247), (63, 40262), (73, 40337), (74, 40340),

Gene: Aziz_62 Start: 41623, Stop: 42369, Start Num: 11

Candidate Starts for Aziz_62:

(Start: 11 @41623 has 5 MA's), (23, 41845), (32, 41929), (33, 41935), (35, 41941), (38, 41968), (43, 42025), (46, 42064), (47, 42070), (51, 42124), (52, 42127), (56, 42217), (59, 42244), (71, 42331), (73, 42358),

Gene: Azrael100_67 Start: 44691, Stop: 45596, Start Num: 6

Candidate Starts for Azrael100_67:

(Start: 6 @44691 has 6 MA's), (10, 44844), (12, 44853), (13, 44859), (16, 44889), (17, 44901), (19, 44952), (22, 45060), (24, 45081), (26, 45096), (31, 45144), (40, 45210), (41, 45219), (45, 45276), (56, 45444), (57, 45462), (67, 45528), (68, 45534), (70, 45549), (73, 45585),

Gene: Bongo_56 Start: 39492, Stop: 40352, Start Num: 7

Candidate Starts for Bongo_56:

(Start: 7 @39492 has 16 MA's), (Start: 11 @39606 has 5 MA's), (28, 39864), (30, 39900), (33, 39918), (35, 39924), (36, 39930), (38, 39951), (43, 40008), (46, 40047), (47, 40053), (50, 40104), (56, 40200), (61, 40251), (63, 40266), (73, 40341), (74, 40344),

Gene: Bricole_56 Start: 39474, Stop: 40334, Start Num: 7

Candidate Starts for Bricole_56:

(Start: 7 @39474 has 16 MA's), (Start: 11 @39588 has 5 MA's), (28, 39846), (30, 39882), (33, 39900), (35, 39906), (36, 39912), (38, 39933), (43, 39990), (46, 40029), (47, 40035), (50, 40086), (56, 40182), (61, 40233), (63, 40248), (73, 40323), (74, 40326),

Gene: Catfish_44 Start: 31656, Stop: 32582, Start Num: 3

Candidate Starts for Catfish_44:

(Start: 3 @31656 has 2 MA's), (9, 31797), (Start: 11 @31842 has 5 MA's), (12, 31845), (17, 31893), (18, 31935), (21, 32025), (22, 32052), (27, 32097), (29, 32112), (32, 32139), (37, 32166), (39, 32178), (49, 32289), (51, 32325), (53, 32355), (58, 32445), (60, 32457), (65, 32505), (66, 32508), (69, 32526),

Gene: Cosmo_68 Start: 44692, Stop: 45597, Start Num: 6

Candidate Starts for Cosmo_68:

(Start: 6 @44692 has 6 MA's), (10, 44845), (12, 44854), (13, 44860), (16, 44890), (17, 44902), (19, 44953), (22, 45061), (24, 45082), (26, 45097), (31, 45145), (40, 45211), (41, 45220), (45, 45277), (56, 45445), (57, 45463), (67, 45529), (68, 45535), (70, 45550), (73, 45586),

Gene: Diminimus_57 Start: 39487, Stop: 40347, Start Num: 7

Candidate Starts for Diminimus_57:

(Start: 7 @39487 has 16 MA's), (Start: 11 @39601 has 5 MA's), (28, 39859), (30, 39895), (33, 39913), (35, 39919), (36, 39925), (38, 39946), (43, 40003), (46, 40042), (47, 40048), (50, 40099), (56, 40195), (61, 40246), (63, 40261), (73, 40336), (74, 40339),

Gene: Dulcita_57 Start: 39488, Stop: 40348, Start Num: 7

Candidate Starts for Dulcita_57:

(Start: 7 @39488 has 16 MA's), (Start: 11 @39602 has 5 MA's), (28, 39860), (30, 39896), (33, 39914), (35, 39920), (36, 39926), (38, 39947), (43, 40004), (46, 40043), (47, 40049), (50, 40100), (56, 40196), (61, 40247), (63, 40262), (73, 40337), (74, 40340),

Gene: EniyanLRS_64 Start: 44431, Stop: 45336, Start Num: 6

Candidate Starts for EniyanLRS_64:

(1, 44380), (2, 44392), (4, 44416), (Start: 6 @44431 has 6 MA's), (10, 44584), (12, 44593), (13, 44599), (16, 44629), (17, 44641), (19, 44692), (20, 44758), (22, 44800), (23, 44812), (24, 44821), (26, 44836), (31, 44884), (40, 44950), (41, 44959), (45, 45016), (56, 45184), (57, 45202), (67, 45268), (68, 45274), (70, 45289), (73, 45325),

Gene: Estes_64 Start: 41895, Stop: 42641, Start Num: 11

Candidate Starts for Estes_64:

(Start: 11 @41895 has 5 MA's), (32, 42201), (33, 42207), (35, 42213), (38, 42240), (43, 42297), (46, 42336), (47, 42342), (51, 42396), (52, 42399), (56, 42489), (59, 42516), (71, 42603), (73, 42630),

Gene: FreakyGoo_57 Start: 39488, Stop: 40348, Start Num: 7

Candidate Starts for FreakyGoo_57:

(Start: 7 @39488 has 16 MA's), (Start: 11 @39602 has 5 MA's), (28, 39860), (30, 39896), (33, 39914), (35, 39920), (36, 39926), (38, 39947), (43, 40004), (46, 40043), (47, 40049), (50, 40100), (56, 40196), (61, 40247), (63, 40262), (73, 40337), (74, 40340),

Gene: GardenSalsa_64 Start: 42057, Stop: 42803, Start Num: 11

Candidate Starts for GardenSalsa_64:

(Start: 11 @42057 has 5 MA's), (32, 42363), (33, 42369), (35, 42375), (38, 42402), (43, 42459), (46, 42498), (47, 42504), (51, 42558), (52, 42561), (56, 42651), (59, 42678), (71, 42765), (73, 42792),

Gene: GenevaB15_63 Start: 41623, Stop: 42369, Start Num: 11

Candidate Starts for GenevaB15_63:

(Start: 11 @41623 has 5 MA's), (23, 41845), (32, 41929), (33, 41935), (35, 41941), (38, 41968), (43, 42025), (46, 42064), (47, 42070), (51, 42124), (52, 42127), (56, 42217), (59, 42244), (71, 42331), (73, 42358),

Gene: Glaske16_57 Start: 39487, Stop: 40347, Start Num: 7

Candidate Starts for Glaske16_57:

(Start: 7 @39487 has 16 MA's), (Start: 11 @39601 has 5 MA's), (28, 39859), (30, 39895), (33, 39913), (35, 39919), (36, 39925), (38, 39946), (43, 40003), (46, 40042), (47, 40048), (50, 40099), (56, 40195), (61, 40246), (63, 40261), (73, 40336), (74, 40339),

Gene: IPHane7_56 Start: 39492, Stop: 40352, Start Num: 7

Candidate Starts for IPHane7_56:

(Start: 7 @39492 has 16 MA's), (Start: 11 @39606 has 5 MA's), (28, 39864), (30, 39900), (33, 39918), (35, 39924), (36, 39930), (38, 39951), (43, 40008), (46, 40047), (47, 40053), (50, 40104), (56, 40200), (61, 40251), (63, 40266), (73, 40341), (74, 40344),

Gene: Izel_57 Start: 39487, Stop: 40347, Start Num: 7

Candidate Starts for Izel_57:

(Start: 7 @39487 has 16 MA's), (Start: 11 @39601 has 5 MA's), (28, 39859), (30, 39895), (33, 39913), (35, 39919), (36, 39925), (38, 39946), (43, 40003), (46, 40042), (47, 40048), (50, 40099), (56, 40195), (61, 40246), (63, 40261), (73, 40336), (74, 40339),

Gene: KleverKiS_57 Start: 39468, Stop: 40328, Start Num: 7

Candidate Starts for KleverKiS_57:

(Start: 7 @39468 has 16 MA's), (Start: 11 @39582 has 5 MA's), (28, 39840), (30, 39876), (33, 39894), (35, 39900), (36, 39906), (38, 39927), (43, 39984), (46, 40023), (47, 40029), (50, 40080), (56, 40176), (61, 40227), (63, 40242), (73, 40317), (74, 40320),

Gene: LilhomieP_55 Start: 39492, Stop: 40352, Start Num: 7

Candidate Starts for LilhomieP_55:

(Start: 7 @39492 has 16 MA's), (Start: 11 @39606 has 5 MA's), (28, 39864), (30, 39900), (33, 39918), (35, 39924), (36, 39930), (38, 39951), (43, 40008), (46, 40047), (47, 40053), (50, 40104), (56, 40200), (61, 40251), (63, 40266), (73, 40341), (74, 40344),

Gene: MaryV_67 Start: 44513, Stop: 45418, Start Num: 6

Candidate Starts for MaryV_67:

(Start: 6 @44513 has 6 MA's), (10, 44666), (12, 44675), (13, 44681), (16, 44711), (17, 44723), (19, 44774), (22, 44882), (24, 44903), (26, 44918), (31, 44966), (40, 45032), (41, 45041), (45, 45098), (56, 45266), (57, 45284), (67, 45350), (68, 45356), (70, 45371), (73, 45407),

Gene: MrMagoo_65 Start: 42057, Stop: 42803, Start Num: 11

Candidate Starts for MrMagoo_65:

(Start: 11 @42057 has 5 MA's), (32, 42363), (33, 42369), (35, 42375), (38, 42402), (43, 42459), (46, 42498), (47, 42504), (51, 42558), (52, 42561), (56, 42651), (59, 42678), (71, 42765), (73, 42792),

Gene: Nanosmite_61 Start: 41136, Stop: 41996, Start Num: 7

Candidate Starts for Nanosmite_61:

(Start: 7 @41136 has 16 MA's), (Start: 11 @41250 has 5 MA's), (28, 41508), (30, 41544), (33, 41562), (35, 41568), (43, 41652), (46, 41691), (51, 41751), (56, 41844), (61, 41895), (73, 41985), (74, 41988),

Gene: PegLeg_56 Start: 39491, Stop: 40351, Start Num: 7

Candidate Starts for PegLeg_56:

(Start: 7 @39491 has 16 MA's), (Start: 11 @39605 has 5 MA's), (28, 39863), (30, 39899), (33, 39917), (35, 39923), (36, 39929), (38, 39950), (43, 40007), (46, 40046), (47, 40052), (50, 40103), (56, 40199), (61, 40250), (63, 40265), (73, 40340), (74, 40343),

Gene: Reindeer_58 Start: 40686, Stop: 41546, Start Num: 7

Candidate Starts for Reindeer_58:

(Start: 7 @40686 has 16 MA's), (Start: 11 @40800 has 5 MA's), (15, 40830), (21, 40980), (25, 41034), (27, 41055), (35, 41118), (43, 41202), (46, 41241), (47, 41247), (50, 41298), (56, 41394), (73, 41535),

Gene: Rey_63 Start: 41702, Stop: 42604, Start Num: 6

Candidate Starts for Rey_63:

(Start: 6 @41702 has 6 MA's), (Start: 7 @41744 has 16 MA's), (8, 41774), (Start: 11 @41858 has 5 MA's), (13, 41867), (30, 42152), (33, 42170), (35, 42176), (42, 42251), (43, 42260), (46, 42299), (56, 42452), (61, 42503), (72, 42575),

Gene: RoseMarie_61 Start: 42948, Stop: 43808, Start Num: 7

Candidate Starts for RoseMarie_61:

(Start: 7 @42948 has 16 MA's), (Start: 11 @43062 has 5 MA's), (28, 43320), (30, 43356), (33, 43374), (35, 43380), (36, 43386), (43, 43464), (46, 43503), (47, 43509), (48, 43521), (50, 43560), (51, 43563), (56, 43656), (62, 43716), (73, 43797), (74, 43800),

Gene: Schmidt_40 Start: 28005, Stop: 28883, Start Num: 3

Candidate Starts for Schmidt_40:

(Start: 3 @28005 has 2 MA's), (5, 28020), (9, 28146), (Start: 11 @28191 has 5 MA's), (12, 28194), (13, 28200), (14, 28203), (17, 28242), (18, 28284), (19, 28296), (21, 28374), (27, 28446), (29, 28461), (32, 28488), (34, 28497), (37, 28515), (44, 28605), (46, 28617), (49, 28638), (54, 28716), (55, 28722), (64, 28845), (69, 28875),

Gene: Skinny_58 Start: 39921, Stop: 40781, Start Num: 7

Candidate Starts for Skinny_58:

(Start: 7 @39921 has 16 MA's), (Start: 11 @40035 has 5 MA's), (28, 40293), (30, 40329), (33, 40347), (35, 40353), (36, 40359), (38, 40380), (43, 40437), (46, 40476), (47, 40482), (50, 40533), (56, 40629), (61, 40680), (63, 40695), (73, 40770), (74, 40773),

Gene: SlimJimmy_55 Start: 39476, Stop: 40336, Start Num: 7

Candidate Starts for SlimJimmy_55:

(Start: 7 @39476 has 16 MA's), (Start: 11 @39590 has 5 MA's), (28, 39848), (30, 39884), (33, 39902), (35, 39908), (36, 39914), (38, 39935), (43, 39992), (46, 40031), (47, 40037), (50, 40088), (56, 40184), (61, 40235), (63, 40250), (73, 40325), (74, 40328),

Gene: TpudiCK_58 Start: 39491, Stop: 40351, Start Num: 7

Candidate Starts for TpudiCK_58:

(Start: 7 @39491 has 16 MA's), (Start: 11 @39605 has 5 MA's), (28, 39863), (30, 39899), (33, 39917), (35, 39923), (36, 39929), (38, 39950), (43, 40007), (46, 40046), (47, 40052), (50, 40103), (56, 40199), (61, 40250), (63, 40265), (73, 40340), (74, 40343),

Gene: TyDawg_56 Start: 39492, Stop: 40352, Start Num: 7

Candidate Starts for TyDawg_56:

(Start: 7 @39492 has 16 MA's), (Start: 11 @39606 has 5 MA's), (28, 39864), (30, 39900), (33, 39918), (35, 39924), (36, 39930), (38, 39951), (43, 40008), (46, 40047), (47, 40053), (50, 40104), (56, 40200), (61, 40251), (63, 40266), (73, 40341), (74, 40344),

Gene: Wildcat_67 Start: 44523, Stop: 45428, Start Num: 6

Candidate Starts for Wildcat_67:

(Start: 6 @44523 has 6 MA's), (10, 44676), (12, 44685), (13, 44691), (16, 44721), (17, 44733), (19, 44784), (22, 44892), (24, 44913), (26, 44928), (31, 44976), (40, 45042), (41, 45051), (45, 45108), (56, 45276), (57, 45294), (67, 45360), (68, 45366), (70, 45381), (73, 45417),