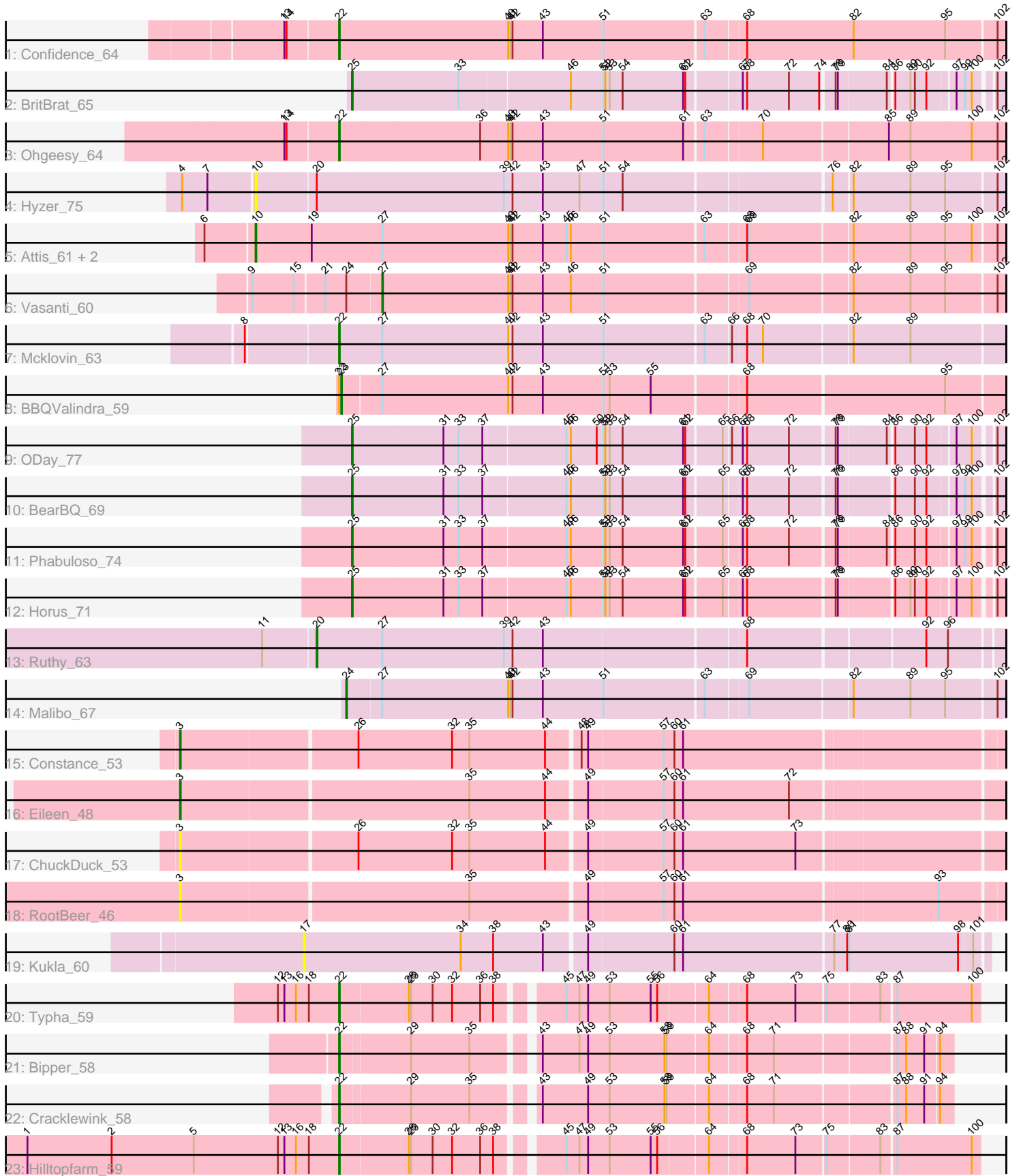


Pham 171721



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 171721 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171721 has 25 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Confidence_64
- Track 2 : BritBrat_65
- Track 3 : Ohgeesy_64
- Track 4 : Hyzer_75
- Track 5 : Attis_61, LordFarquaad_63, SoilAssassin_61
- Track 6 : Vasanti_60
- Track 7 : Mcklovin_63
- Track 8 : BBQValindra_59
- Track 9 : ODay_77
- Track 10 : BearBQ_69
- Track 11 : Phabuloso_74
- Track 12 : Horus_71
- Track 13 : Ruthy_63
- Track 14 : Malibo_67
- Track 15 : Constance_53
- Track 16 : Eileen_48
- Track 17 : ChuckDuck_53
- Track 18 : RootBeer_46
- Track 19 : Kukla_60
- Track 20 : Typha_59
- Track 21 : Bipper_58
- Track 22 : Cracklewink_58
- Track 23 : Hilltopfarm_59

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

The start number called the most often in the published annotations is 22, it was called in 7 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bipper_58, Confidence_64, Cracklewink_58, Hilltopfarm_59, Mcklovin_63, Ohgeesy_64, Typha_59,

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

- BBQValindra_59,

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

- Attis_61, BearBQ_69, BritBrat_65, ChuckDuck_53, Constance_53, Eileen_48, Horus_71, Hyzer_75, Kukla_60, LordFarquaad_63, Malibo_67, ODay_77, Phabuloso_74, RootBeer_46, Ruthy_63, SoilAssassin_61, Vasanti_60,

Summary by start number:

Start 3:

- Found in 4 of 25 (16.0%) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChuckDuck_53 (FA), Constance_53 (FA), Eileen_48 (FA), RootBeer_46 (FA),

Start 10:

- Found in 4 of 25 (16.0%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_61 (CZ2), Hyzer_75 (CZ1), LordFarquaad_63 (CZ2), SoilAssassin_61 (CZ2),

Start 17:

- Found in 1 of 25 (4.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla_60 (FJ),

Start 20:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ruthy_63 (DW),

Start 22:

- Found in 8 of 25 (32.0%) of genes in pham
- Manual Annotations of this start: 7 of 21
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bipper_58 (Y), Confidence_64 (CY1), Cracklewink_58 (Y), Hilltopfarm_59 (Y), Mcklovin_63 (CZ4), Ohgeesy_64 (CZ), Typha_59 (Y),

Start 23:

- Found in 1 of 25 (4.0%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_59 (DB),

Start 24:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 50.0% of time when present

- Phage (with cluster) where this start called: Malibo_67 (DW),

Start 25:

- Found in 5 of 25 (20.0%) of genes in pham
- Manual Annotations of this start: 5 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ_69 (DN), BritBrat_65 (CY2), Horus_71 (DN1), ODay_77 (DN), Phabuloso_74 (DN1),

Start 27:

- Found in 8 of 25 (32.0%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Vasanti_60 (CZ2),

Summary by clusters:

There are 13 clusters represented in this pham: DN, CY2, CY1, CZ, CZ2, CZ1, DB, CZ4, FA, DN1, Y, DW, FJ,

Info for manual annotations of cluster CY1:

- Start number 22 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 25 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 22 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 10 was manually annotated 3 times for cluster CZ2.
- Start number 27 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 22 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DB:

- Start number 23 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster DN1:

- Start number 25 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DW:

- Start number 20 was manually annotated 1 time for cluster DW.
- Start number 24 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster FA:

- Start number 3 was manually annotated 2 times for cluster FA.

Info for manual annotations of cluster Y:

•Start number 22 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Attis_61 Start: 41335, Stop: 42336, Start Num: 10

Candidate Starts for Attis_61:

(6, 41272), (Start: 10 @41335 has 3 MA's), (19, 41413), (Start: 27 @41509 has 1 MA's), (40, 41683), (41, 41686), (42, 41689), (43, 41731), (45, 41764), (46, 41770), (51, 41812), (63, 41947), (68, 41998), (69, 42001), (82, 42133), (89, 42211), (95, 42259), (100, 42295), (102, 42325),

Gene: BBQValindra_59 Start: 41751, Stop: 42629, Start Num: 23

Candidate Starts for BBQValindra_59:

(Start: 22 @41748 has 7 MA's), (Start: 23 @41751 has 1 MA's), (Start: 27 @41802 has 1 MA's), (40, 41976), (42, 41982), (43, 42024), (51, 42105), (53, 42114), (55, 42171), (68, 42291), (95, 42552),

Gene: BearBQ_69 Start: 43538, Stop: 44368, Start Num: 25

Candidate Starts for BearBQ_69:

(Start: 25 @43538 has 5 MA's), (31, 43664), (33, 43685), (37, 43718), (45, 43826), (46, 43832), (51, 43874), (52, 43877), (53, 43883), (54, 43901), (61, 43982), (62, 43985), (65, 44030), (67, 44051), (68, 44057), (72, 44111), (78, 44168), (79, 44171), (86, 44240), (90, 44267), (92, 44282), (97, 44315), (99, 44327), (100, 44336), (102, 44357),

Gene: Bipper_58 Start: 42349, Stop: 43125, Start Num: 22

Candidate Starts for Bipper_58:

(Start: 22 @42349 has 7 MA's), (29, 42442), (35, 42523), (43, 42598), (47, 42649), (49, 42661), (53, 42691), (58, 42766), (59, 42769), (64, 42820), (68, 42865), (71, 42898), (87, 43054), (88, 43066), (91, 43090), (94, 43108),

Gene: BritBrat_65 Start: 43022, Stop: 43852, Start Num: 25

Candidate Starts for BritBrat_65:

(Start: 25 @43022 has 5 MA's), (33, 43169), (46, 43316), (51, 43358), (52, 43361), (53, 43367), (54, 43385), (61, 43466), (62, 43469), (67, 43535), (68, 43541), (72, 43595), (74, 43637), (78, 43652), (79, 43655), (84, 43718), (86, 43724), (89, 43745), (90, 43751), (92, 43766), (97, 43799), (99, 43811), (100, 43820), (102, 43841),

Gene: ChuckDuck_53 Start: 34124, Stop: 35224, Start Num: 3

Candidate Starts for ChuckDuck_53:

(Start: 3 @34124 has 2 MA's), (26, 34358), (32, 34487), (35, 34511), (44, 34616), (49, 34667), (57, 34769), (60, 34784), (61, 34796), (73, 34952),

Gene: Confidence_64 Start: 42274, Stop: 43167, Start Num: 22

Candidate Starts for Confidence_64:

(13, 42202), (14, 42205), (Start: 22 @42274 has 7 MA's), (40, 42505), (41, 42508), (42, 42511), (43, 42553), (51, 42634), (63, 42769), (68, 42820), (82, 42964), (95, 43090), (102, 43156),

Gene: Constance_53 Start: 34710, Stop: 35807, Start Num: 3

Candidate Starts for Constance_53:

(Start: 3 @34710 has 2 MA's), (26, 34944), (32, 35073), (35, 35097), (44, 35202), (48, 35244), (49, 35253), (57, 35355), (60, 35370), (61, 35382),

Gene: Cracklewink_58 Start: 42330, Stop: 43106, Start Num: 22

Candidate Starts for Cracklewink_58:

(Start: 22 @42330 has 7 MA's), (29, 42423), (35, 42504), (43, 42579), (49, 42642), (53, 42672), (58, 42747), (59, 42750), (64, 42801), (68, 42846), (71, 42879), (87, 43035), (88, 43047), (91, 43071), (94, 43089),

Gene: Eileen_48 Start: 31825, Stop: 32925, Start Num: 3

Candidate Starts for Eileen_48:

(Start: 3 @31825 has 2 MA's), (35, 32212), (44, 32317), (49, 32368), (57, 32470), (60, 32485), (61, 32497), (72, 32644),

Gene: Hilltopfarm_59 Start: 43214, Stop: 44035, Start Num: 22

Candidate Starts for Hilltopfarm_59:

(1, 42782), (2, 42899), (5, 43013), (12, 43130), (13, 43139), (16, 43154), (18, 43172), (Start: 22 @43214 has 7 MA's), (28, 43307), (29, 43310), (30, 43340), (32, 43367), (36, 43406), (38, 43424), (45, 43499), (47, 43517), (49, 43529), (53, 43559), (55, 43616), (56, 43625), (64, 43688), (68, 43733), (73, 43796), (75, 43835), (83, 43904), (87, 43922), (100, 44024),

Gene: Horus_71 Start: 43494, Stop: 44324, Start Num: 25

Candidate Starts for Horus_71:

(Start: 25 @43494 has 5 MA's), (31, 43620), (33, 43641), (37, 43674), (45, 43782), (46, 43788), (51, 43830), (52, 43833), (53, 43839), (54, 43857), (61, 43938), (62, 43941), (65, 43986), (67, 44007), (68, 44013), (78, 44124), (79, 44127), (86, 44196), (89, 44217), (90, 44223), (92, 44238), (97, 44271), (100, 44292), (102, 44313),

Gene: Hyzer_75 Start: 50006, Stop: 50998, Start Num: 10

Candidate Starts for Hyzer_75:

(4, 49919), (7, 49952), (Start: 10 @50006 has 3 MA's), (Start: 20 @50087 has 1 MA's), (39, 50342), (42, 50354), (43, 50396), (47, 50447), (51, 50477), (54, 50504), (76, 50771), (82, 50795), (89, 50873), (95, 50921), (102, 50987),

Gene: Kukla_60 Start: 36053, Stop: 36976, Start Num: 17

Candidate Starts for Kukla_60:

(17, 36053), (34, 36269), (38, 36314), (43, 36383), (49, 36437), (60, 36554), (61, 36566), (77, 36770), (80, 36788), (81, 36791), (98, 36941), (101, 36959),

Gene: LordFarquaad_63 Start: 41316, Stop: 42317, Start Num: 10

Candidate Starts for LordFarquaad_63:

(6, 41253), (Start: 10 @41316 has 3 MA's), (19, 41394), (Start: 27 @41490 has 1 MA's), (40, 41664), (41, 41667), (42, 41670), (43, 41712), (45, 41745), (46, 41751), (51, 41793), (63, 41928), (68, 41979), (69, 41982), (82, 42114), (89, 42192), (95, 42240), (100, 42276), (102, 42306),

Gene: Malibo_67 Start: 44890, Stop: 45759, Start Num: 24

Candidate Starts for Malibo_67:

(Start: 24 @44890 has 1 MA's), (Start: 27 @44935 has 1 MA's), (40, 45109), (41, 45112), (42, 45115), (43, 45157), (51, 45238), (63, 45373), (69, 45427), (82, 45556), (89, 45634), (95, 45682), (102, 45748),

Gene: Mcklovin_63 Start: 46941, Stop: 47825, Start Num: 22

Candidate Starts for Mcklovin_63:

(8, 46821), (Start: 22 @46941 has 7 MA's), (Start: 27 @46998 has 1 MA's), (40, 47172), (42, 47178), (43, 47220), (51, 47301), (63, 47436), (66, 47469), (68, 47487), (70, 47505), (82, 47622), (89, 47700),

Gene: ODay_77 Start: 44730, Stop: 45560, Start Num: 25

Candidate Starts for ODay_77:

(Start: 25 @44730 has 5 MA's), (31, 44856), (33, 44877), (37, 44910), (45, 45018), (46, 45024), (50, 45060), (51, 45066), (52, 45069), (53, 45075), (54, 45093), (61, 45174), (62, 45177), (65, 45222), (66, 45231), (67, 45243), (68, 45249), (72, 45303), (78, 45360), (79, 45363), (84, 45426), (86, 45432), (90, 45459), (92, 45474), (97, 45507), (100, 45528), (102, 45549),

Gene: Ohgeesy_64 Start: 43662, Stop: 44552, Start Num: 22

Candidate Starts for Ohgeesy_64:

(13, 43590), (14, 43593), (Start: 22 @43662 has 7 MA's), (36, 43854), (40, 43893), (41, 43896), (42, 43899), (43, 43941), (51, 44022), (61, 44133), (63, 44157), (70, 44226), (85, 44391), (89, 44421), (100, 44505), (102, 44541),

Gene: Phabuloso_74 Start: 42992, Stop: 43822, Start Num: 25

Candidate Starts for Phabuloso_74:

(Start: 25 @42992 has 5 MA's), (31, 43118), (33, 43139), (37, 43172), (45, 43280), (46, 43286), (51, 43328), (52, 43331), (53, 43337), (54, 43355), (61, 43436), (62, 43439), (65, 43484), (67, 43505), (68, 43511), (72, 43565), (78, 43622), (79, 43625), (84, 43688), (86, 43694), (90, 43721), (92, 43736), (97, 43769), (99, 43781), (100, 43790), (102, 43811),

Gene: RootBeer_46 Start: 30900, Stop: 31997, Start Num: 3

Candidate Starts for RootBeer_46:

(Start: 3 @30900 has 2 MA's), (35, 31287), (49, 31443), (57, 31545), (60, 31560), (61, 31572), (93, 31914),

Gene: Ruthy_63 Start: 45360, Stop: 46259, Start Num: 20

Candidate Starts for Ruthy_63:

(11, 45288), (Start: 20 @45360 has 1 MA's), (Start: 27 @45447 has 1 MA's), (39, 45615), (42, 45627), (43, 45669), (68, 45936), (92, 46161), (96, 46191),

Gene: SoilAssassin_61 Start: 41334, Stop: 42335, Start Num: 10

Candidate Starts for SoilAssassin_61:

(6, 41271), (Start: 10 @41334 has 3 MA's), (19, 41412), (Start: 27 @41508 has 1 MA's), (40, 41682), (41, 41685), (42, 41688), (43, 41730), (45, 41763), (46, 41769), (51, 41811), (63, 41946), (68, 41997), (69, 42000), (82, 42132), (89, 42210), (95, 42258), (100, 42294), (102, 42324),

Gene: Typha_59 Start: 43522, Stop: 44343, Start Num: 22

Candidate Starts for Typha_59:

(12, 43438), (13, 43447), (16, 43462), (18, 43480), (Start: 22 @43522 has 7 MA's), (28, 43615), (29, 43618), (30, 43648), (32, 43675), (36, 43714), (38, 43732), (45, 43807), (47, 43825), (49, 43837), (53, 43867), (55, 43924), (56, 43933), (64, 43996), (68, 44041), (73, 44104), (75, 44143), (83, 44212), (87, 44230), (100, 44332),

Gene: Vasanti_60 Start: 40525, Stop: 41349, Start Num: 27

Candidate Starts for Vasanti_60:

(9, 40357), (15, 40414), (21, 40453), (Start: 24 @40480 has 1 MA's), (Start: 27 @40525 has 1 MA's), (40, 40699), (41, 40702), (42, 40705), (43, 40747), (46, 40786), (51, 40828), (69, 41017), (82, 41146), (89, 41224), (95, 41272), (102, 41338),