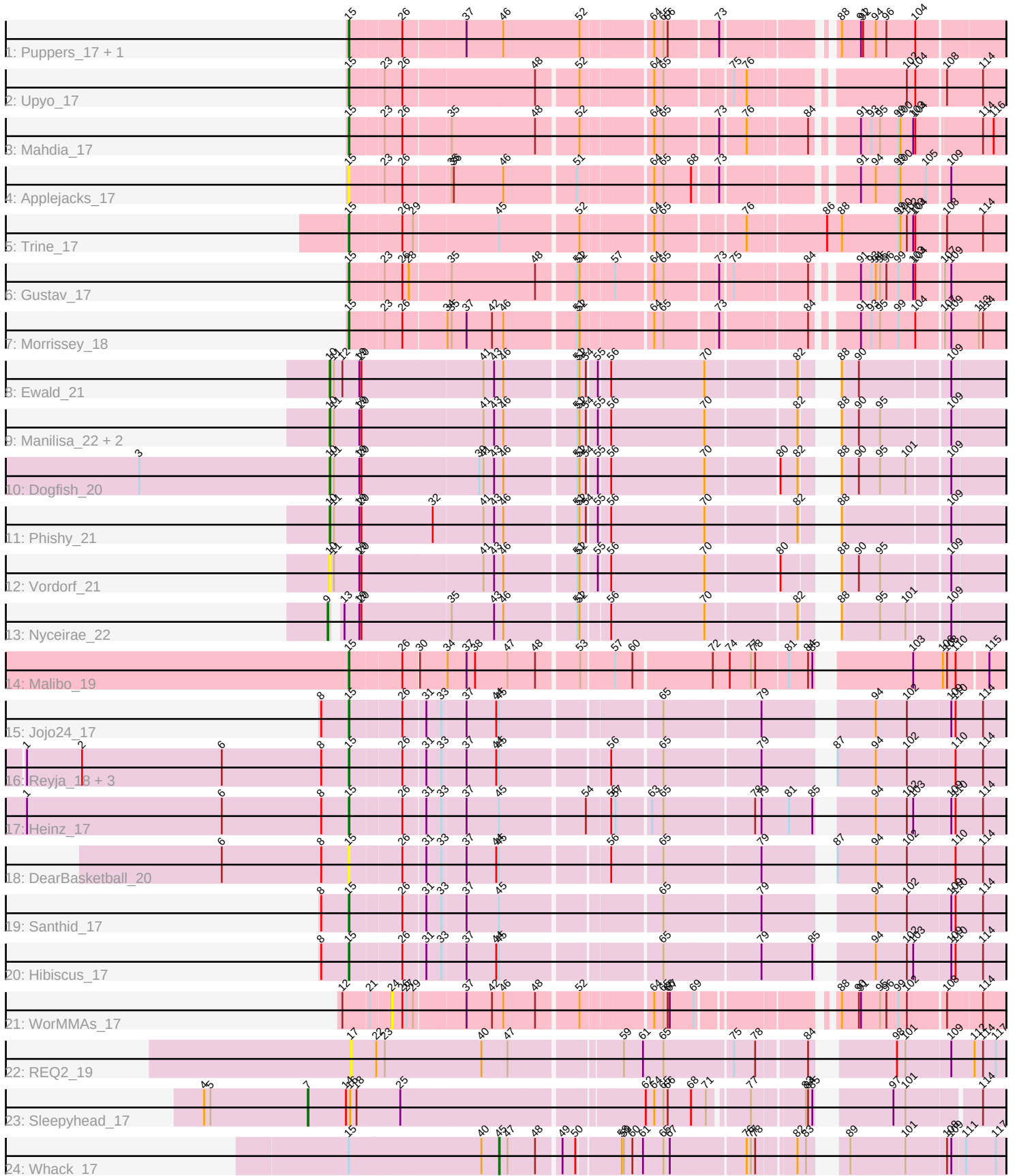


Pham 331110



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 331110 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331110 has 30 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Puppies_17, Widow_17
- Track 2 : Upyo_17
- Track 3 : Mahdia_17
- Track 4 : Applejacks_17
- Track 5 : Trine_17
- Track 6 : Gustav_17
- Track 7 : Morrissey_18
- Track 8 : Ewald_21
- Track 9 : Manilisa_22, Meyran_20, BabyMoney_20
- Track 10 : Dogfish_20
- Track 11 : Phishy_21
- Track 12 : Vordorf_21
- Track 13 : Nyceirae_22
- Track 14 : Malibo_19
- Track 15 : Jojo24_17
- Track 16 : Reyja_18, Tarzan_17, DinoNuggs_18, DonkeyMan_17
- Track 17 : Heinz_17
- Track 18 : DearBasketball_20
- Track 19 : Santhid_17
- Track 20 : Hibiscus_17
- Track 21 : WorMMAs_17
- Track 22 : REQ2_19
- Track 23 : Sleepyhead_17
- Track 24 : Whack_17

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

The start number called the most often in the published annotations is 15, it was called in 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Applejacks_17, DearBasketball_20, DinoNuggs_18, DonkeyMan_17, Gustav_17, Heinz_17, Hibiscus_17, Jojo24_17, Mahdia_17, Malibo_19, Morrissey_18, Puppies_17, Reyja_18, Santhid_17, Tarzan_17, Trine_17, Upyo_17, Widow_17,

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

- Whack_17,

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

- BabyMoney_20, Dogfish_20, Ewald_21, Manilisa_22, Meyran_20, Nyceirae_22, Phishy_21, REQ2_19, Sleepyhead_17, Vordorf_21, WorMMAs_17,

Summary by start number:

Start 7:

- Found in 1 of 30 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead_17 (singleton),

Start 9:

- Found in 1 of 30 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nyceirae_22 (DT),

Start 10:

- Found in 7 of 30 (23.3%) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyMoney_20 (DT), Dogfish_20 (DT), Ewald_21 (DT), Manilisa_22 (DT), Meyran_20 (DT), Phishy_21 (DT), Vordorf_21 (DT),

Start 15:

- Found in 19 of 30 (63.3%) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Applejacks_17 (CD), DearBasketball_20 (DY), DinoNuggs_18 (DY), DonkeyMan_17 (DY), Gustav_17 (CD), Heinz_17 (DY), Hibiscus_17 (DY), Jojo24_17 (DY), Mahdia_17 (CD), Malibo_19 (DW), Morrissey_18 (CD), Puppies_17 (CD), Reyja_18 (DY), Santhid_17 (DY), Tarzan_17 (DY), Trine_17 (CD), Upyo_17 (CD), Widow_17 (CD),

Start 17:

- Found in 1 of 30 (3.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2_19 (singleton),

Start 24:

- Found in 1 of 30 (3.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WorMMAs_17 (UNK),

Start 45:

- Found in 11 of 30 (36.7%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Whack_17 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, CD, DY, DW, DT, UNK,

Info for manual annotations of cluster CD:

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

Info for manual annotations of cluster DT:

- Start number 9 was manually annotated 1 time for cluster DT.
- Start number 10 was manually annotated 4 times for cluster DT.

Info for manual annotations of cluster DW:

- Start number 15 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

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

Gene Information:

Gene: Applejacks_17 Start: 14230, Stop: 15060, Start Num: 15

Candidate Starts for Applejacks_17:

(Start: 15 @14230 has 15 MA's), (23, 14275), (26, 14299), (35, 14362), (36, 14365), (46, 14434), (51, 14530), (64, 14626), (65, 14638), (68, 14677), (73, 14707), (91, 14863), (94, 14884), (99, 14914), (100, 14917), (105, 14953), (109, 14983),

Gene: BabyMoney_20 Start: 17148, Stop: 18008, Start Num: 10

Candidate Starts for BabyMoney_20:

(Start: 10 @17148 has 4 MA's), (11, 17154), (19, 17190), (20, 17193), (41, 17361), (43, 17376), (46, 17388), (51, 17484), (52, 17487), (54, 17496), (55, 17508), (56, 17523), (70, 17652), (82, 17772), (88, 17793), (90, 17814), (95, 17844), (109, 17934),

Gene: DearBasketball_20 Start: 14347, Stop: 15189, Start Num: 15

Candidate Starts for DearBasketball_20:

(6, 14167), (8, 14308), (Start: 15 @14347 has 15 MA's), (26, 14416), (31, 14446), (33, 14467), (37, 14500), (44, 14542), (Start: 45 @14545 has 1 MA's), (56, 14686), (65, 14752), (79, 14884), (87, 14959), (94, 15013), (102, 15055), (110, 15121), (114, 15160),

Gene: DinoNuggs_18 Start: 14313, Stop: 15155, Start Num: 15

Candidate Starts for DinoNuggs_18:

(1, 13857), (2, 13935), (6, 14133), (8, 14274), (Start: 15 @14313 has 15 MA's), (26, 14382), (31, 14412), (33, 14433), (37, 14466), (44, 14508), (Start: 45 @14511 has 1 MA's), (56, 14652), (65, 14718), (79, 14850), (87, 14925), (94, 14979), (102, 15021), (110, 15087), (114, 15126),

Gene: Dogfish_20 Start: 17321, Stop: 18181, Start Num: 10

Candidate Starts for Dogfish_20:

(3, 17051), (Start: 10 @17321 has 4 MA's), (11, 17327), (19, 17363), (20, 17366), (39, 17528), (41, 17534), (43, 17549), (46, 17561), (51, 17657), (52, 17660), (54, 17669), (55, 17681), (56, 17696), (70, 17825), (80, 17921), (82, 17945), (88, 17966), (90, 17987), (95, 18017), (101, 18053), (109, 18107),

Gene: DonkeyMan_17 Start: 14102, Stop: 14944, Start Num: 15

Candidate Starts for DonkeyMan_17:

(1, 13646), (2, 13724), (6, 13922), (8, 14063), (Start: 15 @14102 has 15 MA's), (26, 14171), (31, 14201), (33, 14222), (37, 14255), (44, 14297), (Start: 45 @14300 has 1 MA's), (56, 14441), (65, 14507), (79, 14639), (87, 14714), (94, 14768), (102, 14810), (110, 14876), (114, 14915),

Gene: Ewald_21 Start: 17595, Stop: 18455, Start Num: 10

Candidate Starts for Ewald_21:

(Start: 10 @17595 has 4 MA's), (11, 17601), (12, 17613), (19, 17637), (20, 17640), (41, 17808), (43, 17823), (46, 17835), (51, 17931), (52, 17934), (54, 17943), (55, 17955), (56, 17970), (70, 18099), (82, 18219), (88, 18240), (90, 18261), (109, 18381),

Gene: Gustav_17 Start: 14305, Stop: 15132, Start Num: 15

Candidate Starts for Gustav_17:

(Start: 15 @14305 has 15 MA's), (23, 14350), (26, 14374), (28, 14383), (35, 14437), (48, 14554), (51, 14605), (52, 14608), (57, 14653), (64, 14701), (65, 14713), (73, 14782), (75, 14797), (84, 14890), (91, 14938), (93, 14953), (94, 14959), (95, 14965), (96, 14974), (99, 14989), (103, 15010), (104, 15013), (107, 15046), (109, 15055),

Gene: Heinz_17 Start: 14187, Stop: 15035, Start Num: 15

Candidate Starts for Heinz_17:

(1, 13731), (6, 14007), (8, 14148), (Start: 15 @14187 has 15 MA's), (26, 14256), (31, 14286), (33, 14307), (37, 14340), (Start: 45 @14385 has 1 MA's), (54, 14499), (56, 14532), (57, 14538), (63, 14583), (65, 14598), (78, 14721), (79, 14730), (81, 14769), (85, 14802), (94, 14859), (102, 14901), (103, 14910), (109, 14961), (110, 14967), (114, 15006),

Gene: Hibiscus_17 Start: 14141, Stop: 14983, Start Num: 15

Candidate Starts for Hibiscus_17:

(8, 14102), (Start: 15 @14141 has 15 MA's), (26, 14210), (31, 14240), (33, 14261), (37, 14294), (44, 14336), (Start: 45 @14339 has 1 MA's), (65, 14546), (79, 14678), (85, 14750), (94, 14807), (102, 14849), (103, 14858), (109, 14909), (110, 14915), (114, 14954),

Gene: Jojo24_17 Start: 14138, Stop: 14980, Start Num: 15

Candidate Starts for Jojo24_17:

(8, 14099), (Start: 15 @14138 has 15 MA's), (26, 14207), (31, 14237), (33, 14258), (37, 14291), (44, 14333), (Start: 45 @14336 has 1 MA's), (65, 14543), (79, 14675), (94, 14804), (102, 14846), (109, 14906), (110, 14912), (114, 14951),

Gene: Mahdia_17 Start: 13987, Stop: 14814, Start Num: 15

Candidate Starts for Mahdia_17:

(Start: 15 @13987 has 15 MA's), (23, 14032), (26, 14056), (35, 14119), (48, 14236), (52, 14290), (64, 14383), (65, 14395), (73, 14464), (76, 14497), (84, 14572), (91, 14620), (93, 14635), (95, 14647), (99, 14671), (100, 14674), (103, 14692), (104, 14695), (114, 14782), (116, 14797),

Gene: Malibo_19 Start: 15676, Stop: 16518, Start Num: 15

Candidate Starts for Malibo_19:

(Start: 15 @15676 has 15 MA's), (26, 15745), (30, 15766), (34, 15802), (37, 15829), (38, 15841), (47, 15886), (48, 15925), (53, 15979), (57, 16024), (60, 16048), (72, 16153), (74, 16177), (77, 16207), (78, 16213), (81, 16255), (84, 16282), (85, 16288), (103, 16396), (106, 16438), (108, 16444), (110, 16456),

(115, 16498),

Gene: Manilisa_22 Start: 18190, Stop: 19050, Start Num: 10

Candidate Starts for Manilisa_22:

(Start: 10 @18190 has 4 MA's), (11, 18196), (19, 18232), (20, 18235), (41, 18403), (43, 18418), (46, 18430), (51, 18526), (52, 18529), (54, 18538), (55, 18550), (56, 18565), (70, 18694), (82, 18814), (88, 18835), (90, 18856), (95, 18886), (109, 18976),

Gene: Meyran_20 Start: 18053, Stop: 18913, Start Num: 10

Candidate Starts for Meyran_20:

(Start: 10 @18053 has 4 MA's), (11, 18059), (19, 18095), (20, 18098), (41, 18266), (43, 18281), (46, 18293), (51, 18389), (52, 18392), (54, 18401), (55, 18413), (56, 18428), (70, 18557), (82, 18677), (88, 18698), (90, 18719), (95, 18749), (109, 18839),

Gene: Morrissey_18 Start: 15201, Stop: 16028, Start Num: 15

Candidate Starts for Morrissey_18:

(Start: 15 @15201 has 15 MA's), (23, 15246), (26, 15270), (34, 15327), (35, 15333), (37, 15354), (42, 15390), (46, 15405), (51, 15501), (52, 15504), (64, 15597), (65, 15609), (73, 15678), (84, 15786), (91, 15834), (93, 15849), (95, 15861), (99, 15885), (104, 15909), (107, 15942), (109, 15951), (113, 15990), (114, 15996),

Gene: Nyceirae_22 Start: 17929, Stop: 18777, Start Num: 9

Candidate Starts for Nyceirae_22:

(Start: 9 @17929 has 1 MA's), (13, 17938), (19, 17959), (20, 17962), (35, 18085), (43, 18145), (46, 18157), (51, 18253), (52, 18256), (56, 18292), (70, 18421), (82, 18541), (88, 18562), (95, 18613), (101, 18649), (109, 18703),

Gene: Phishy_21 Start: 17919, Stop: 18779, Start Num: 10

Candidate Starts for Phishy_21:

(Start: 10 @17919 has 4 MA's), (11, 17925), (19, 17961), (20, 17964), (32, 18063), (41, 18132), (43, 18147), (46, 18159), (51, 18255), (52, 18258), (54, 18267), (55, 18279), (56, 18294), (70, 18423), (82, 18543), (88, 18564), (109, 18705),

Gene: Puppies_17 Start: 14309, Stop: 15142, Start Num: 15

Candidate Starts for Puppies_17:

(Start: 15 @14309 has 15 MA's), (26, 14378), (37, 14462), (46, 14513), (52, 14621), (64, 14714), (65, 14726), (66, 14732), (73, 14798), (88, 14924), (91, 14951), (92, 14954), (94, 14972), (96, 14987), (104, 15026),

Gene: REQ2_19 Start: 18255, Stop: 19085, Start Num: 17

Candidate Starts for REQ2_19:

(17, 18255), (22, 18288), (23, 18300), (40, 18435), (47, 18471), (59, 18618), (61, 18642), (65, 18669), (75, 18762), (78, 18792), (84, 18852), (98, 18936), (101, 18948), (109, 19008), (112, 19041), (114, 19053), (117, 19071),

Gene: Reyja_18 Start: 14313, Stop: 15155, Start Num: 15

Candidate Starts for Reyja_18:

(1, 13857), (2, 13935), (6, 14133), (8, 14274), (Start: 15 @14313 has 15 MA's), (26, 14382), (31, 14412), (33, 14433), (37, 14466), (44, 14508), (Start: 45 @14511 has 1 MA's), (56, 14652), (65, 14718), (79, 14850), (87, 14925), (94, 14979), (102, 15021), (110, 15087), (114, 15126),

Gene: Santhid_17 Start: 14146, Stop: 14988, Start Num: 15

Candidate Starts for Santhid_17:

(8, 14107), (Start: 15 @14146 has 15 MA's), (26, 14215), (31, 14245), (33, 14266), (37, 14299), (Start: 45 @14344 has 1 MA's), (65, 14551), (79, 14683), (94, 14812), (102, 14854), (109, 14914), (110, 14920), (114, 14959),

Gene: Sleepyhead_17 Start: 14846, Stop: 15721, Start Num: 7

Candidate Starts for Sleepyhead_17:

(4, 14705), (5, 14714), (Start: 7 @14846 has 1 MA's), (14, 14897), (16, 14903), (18, 14912), (25, 14972), (62, 15296), (64, 15308), (65, 15320), (66, 15326), (68, 15359), (71, 15380), (77, 15428), (83, 15494), (84, 15497), (85, 15503), (97, 15581), (101, 15596), (114, 15689),

Gene: Tarzan_17 Start: 14116, Stop: 14958, Start Num: 15

Candidate Starts for Tarzan_17:

(1, 13660), (2, 13738), (6, 13936), (8, 14077), (Start: 15 @14116 has 15 MA's), (26, 14185), (31, 14215), (33, 14236), (37, 14269), (44, 14311), (Start: 45 @14314 has 1 MA's), (56, 14455), (65, 14521), (79, 14653), (87, 14728), (94, 14782), (102, 14824), (110, 14890), (114, 14929),

Gene: Trine_17 Start: 13911, Stop: 14768, Start Num: 15

Candidate Starts for Trine_17:

(Start: 15 @13911 has 15 MA's), (26, 13980), (29, 13995), (Start: 45 @14109 has 1 MA's), (52, 14214), (64, 14307), (65, 14319), (76, 14421), (86, 14523), (88, 14544), (99, 14622), (100, 14625), (102, 14634), (103, 14643), (104, 14646), (108, 14685), (114, 14736),

Gene: Upyo_17 Start: 14116, Stop: 14946, Start Num: 15

Candidate Starts for Upyo_17:

(Start: 15 @14116 has 15 MA's), (23, 14161), (26, 14185), (48, 14365), (52, 14419), (64, 14512), (65, 14524), (75, 14608), (76, 14626), (102, 14812), (104, 14824), (108, 14863), (114, 14914),

Gene: Vordorf_21 Start: 17520, Stop: 18380, Start Num: 10

Candidate Starts for Vordorf_21:

(Start: 10 @17520 has 4 MA's), (11, 17526), (19, 17562), (20, 17565), (41, 17733), (43, 17748), (46, 17760), (51, 17856), (52, 17859), (55, 17880), (56, 17895), (70, 18024), (80, 18120), (88, 18165), (90, 18186), (95, 18216), (109, 18306),

Gene: Whack_17 Start: 16453, Stop: 17082, Start Num: 45

Candidate Starts for Whack_17:

(Start: 15 @16246 has 15 MA's), (40, 16429), (Start: 45 @16453 has 1 MA's), (47, 16465), (48, 16504), (49, 16534), (50, 16552), (58, 16609), (59, 16612), (60, 16624), (61, 16639), (65, 16666), (67, 16675), (76, 16777), (77, 16783), (78, 16789), (82, 16837), (83, 16849), (89, 16876), (101, 16948), (108, 17002), (109, 17008), (111, 17026), (117, 17068),

Gene: Widow_17 Start: 14300, Stop: 15133, Start Num: 15

Candidate Starts for Widow_17:

(Start: 15 @14300 has 15 MA's), (26, 14369), (37, 14453), (46, 14504), (52, 14612), (64, 14705), (65, 14717), (66, 14723), (73, 14789), (88, 14915), (91, 14942), (92, 14945), (94, 14963), (96, 14978), (104, 15017),

Gene: WorMMAs_17 Start: 13807, Stop: 14580, Start Num: 24

Candidate Starts for WorMMAs_17:

(12, 13744), (21, 13780), (24, 13807), (26, 13822), (27, 13828), (29, 13837), (37, 13906), (42, 13942), (46, 13957), (48, 14002), (52, 14056), (64, 14149), (65, 14161), (66, 14167), (67, 14170), (69, 14203), (88, 14359), (90, 14383), (91, 14386), (95, 14413), (96, 14422), (99, 14437), (102, 14449), (108, 14500), (114, 14548),