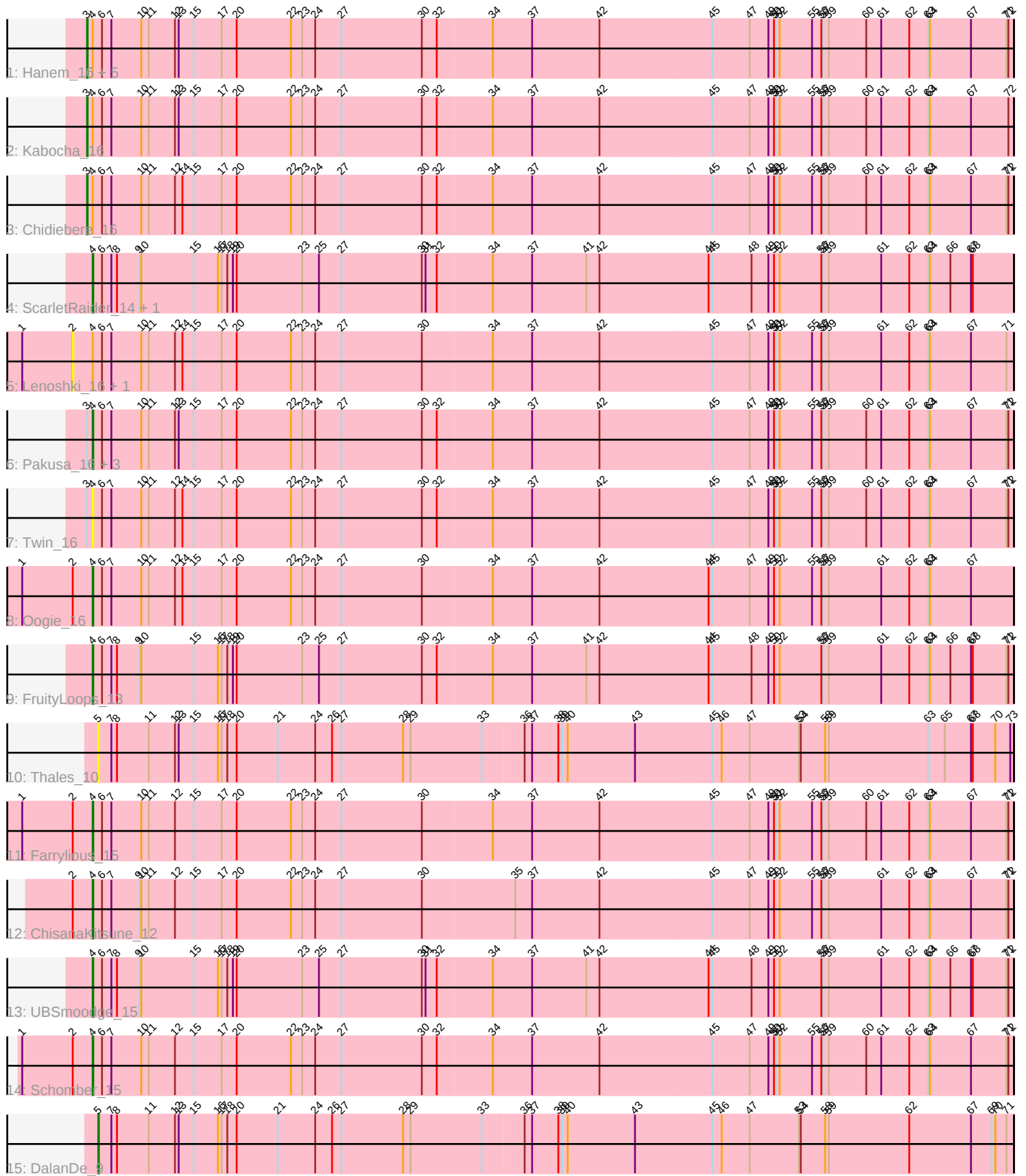


Pham 323604



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 323604 Report

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

Pham number 323604 has 25 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Hanem_16, Amoonguss_16, Argena_16, Gray_16, Mikronejon_16, Toneprano_16
- Track 2 : Kabocha_16
- Track 3 : Chidiebere_16
- Track 4 : ScarletRaider_14, FlyingTortilla_14
- Track 5 : Lenoshki_16, Beted_16
- Track 6 : Pakusa_16, MintFritos_16, Alok_16, EmoNemo_16
- Track 7 : Twin_16
- Track 8 : Oogie_16
- Track 9 : FruityLoops_13
- Track 10 : Thales_10
- Track 11 : Farrylous_15
- Track 12 : ChisanaKitsune_12
- Track 13 : UBSmoodge_15
- Track 14 : Schomber_15
- Track 15 : DalanDe_9

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

The start number called the most often in the published annotations is 4, it was called in 9 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alok_16, ChisanaKitsune_12, EmoNemo_16, Farrylous_15, FlyingTortilla_14, FruityLoops_13, MintFritos_16, Oogie_16, Pakusa_16, ScarletRaider_14, Schomber_15, Twin_16, UBSmoodge_15,

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

- Amoonguss_16, Argena_16, Beted_16, Chidiebere_16, Gray_16, Hanem_16, Kabocha_16, Lenoshki_16, Mikronejon_16, Toneprano_16,

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

- DalanDe_9, Thales_10,

Summary by start number:

Start 2:

- Found in 6 of 25 (24.0%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Beted_16 (DQ), Lenoshki_16 (DQ),

Start 3:

- Found in 13 of 25 (52.0%) of genes in pham
- Manual Annotations of this start: 5 of 15
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Amoonguss_16 (DQ), Argena_16 (DQ), Chidiebere_16 (DQ), Gray_16 (DQ), Hanem_16 (DQ), Kabocha_16 (DQ), Mikronejon_16 (DQ), Toneprano_16 (DQ),

Start 4:

- Found in 23 of 25 (92.0%) of genes in pham
- Manual Annotations of this start: 9 of 15
- Called 56.5% of time when present
- Phage (with cluster) where this start called: Alok_16 (DQ), ChisanaKitsune_12 (DQ), EmoNemo_16 (DQ), Farrylious_15 (DQ), FlyingTortilla_14 (DQ), FruityLoops_13 (DQ), MintFritos_16 (DQ), Oogie_16 (DQ), Pakusa_16 (DQ), ScarletRaider_14 (DQ), Schomber_15 (DQ), Twin_16 (DQ), UBSmoodge_15 (DQ),

Start 5:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe_9 (DQ), Thales_10 (DQ),

Summary by clusters:

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- Start number 3 was manually annotated 5 times for cluster DQ.
- Start number 4 was manually annotated 9 times for cluster DQ.
- Start number 5 was manually annotated 1 time for cluster DQ.

Gene Information:

Gene: Alok_16 Start: 6165, Stop: 7637, Start Num: 4

Candidate Starts for Alok_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Amoonguss_16 Start: 6159, Stop: 7640, Start Num: 3

Candidate Starts for Amoonguss_16:

(Start: 3 @6159 has 5 MA's), (Start: 4 @6168 has 9 MA's), (6, 6183), (7, 6198), (10, 6246), (11, 6258), (12, 6300), (13, 6306), (15, 6330), (17, 6375), (20, 6399), (22, 6486), (23, 6504), (24, 6525), (27, 6567), (30, 6696), (32, 6720), (34, 6807), (37, 6870), (42, 6978), (45, 7158), (47, 7218), (49, 7248), (50, 7257), (51, 7260), (52, 7266), (55, 7317), (56, 7332), (57, 7335), (59, 7344), (60, 7404), (61, 7428), (62, 7473), (63, 7503), (64, 7506), (67, 7572), (71, 7629), (72, 7632),

Gene: Argena_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Argena_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Beted_16 Start: 5761, Stop: 7263, Start Num: 2

Candidate Starts for Beted_16:

(1, 5680), (2, 5761), (Start: 4 @5791 has 9 MA's), (6, 5806), (7, 5821), (10, 5869), (11, 5881), (12, 5923), (14, 5935), (15, 5953), (17, 5998), (20, 6022), (22, 6109), (23, 6127), (24, 6148), (27, 6190), (30, 6319), (34, 6430), (37, 6493), (42, 6601), (45, 6781), (47, 6841), (49, 6871), (50, 6880), (51, 6883), (52, 6889), (55, 6940), (56, 6955), (57, 6958), (59, 6967), (61, 7051), (62, 7096), (63, 7126), (64, 7129), (67, 7195), (71, 7252),

Gene: Chidiebere_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Chidiebere_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (14, 6309), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: ChisanaKitsune_12 Start: 4866, Stop: 6338, Start Num: 4

Candidate Starts for ChisanaKitsune_12:

(2, 4836), (Start: 4 @4866 has 9 MA's), (6, 4881), (7, 4896), (9, 4941), (10, 4944), (11, 4956), (12, 4998), (15, 5028), (17, 5073), (20, 5097), (22, 5184), (23, 5202), (24, 5223), (27, 5265), (30, 5394), (35, 5541), (37, 5568), (42, 5676), (45, 5856), (47, 5916), (49, 5946), (50, 5955), (52, 5964), (55, 6015), (56, 6030), (57, 6033), (59, 6042), (61, 6126), (62, 6171), (63, 6201), (64, 6204), (67, 6270), (71, 6327), (72, 6330),

Gene: DalanDe_9 Start: 4583, Stop: 6043, Start Num: 5

Candidate Starts for DalanDe_9:

(Start: 5 @4583 has 1 MA's), (7, 4604), (8, 4613), (11, 4664), (12, 4706), (13, 4712), (15, 4736), (16, 4775), (17, 4781), (18, 4790), (20, 4805), (21, 4871), (24, 4931), (26, 4958), (27, 4973), (28, 5072), (29, 5084), (33, 5198), (36, 5264), (37, 5276), (38, 5318), (39, 5324), (40, 5333), (43, 5441), (45, 5561), (46, 5576), (47, 5621), (53, 5699), (54, 5702), (58, 5741), (59, 5747), (62, 5876), (67, 5975), (69, 6008), (70, 6014), (71, 6032),

Gene: EmoNemo_16 Start: 6165, Stop: 7637, Start Num: 4

Candidate Starts for EmoNemo_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470),

(63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Farrylious_15 Start: 5918, Stop: 7390, Start Num: 4

Candidate Starts for Farrylious_15:

(1, 5807), (2, 5888), (Start: 4 @5918 has 9 MA's), (6, 5933), (7, 5948), (10, 5996), (11, 6008), (12, 6050), (15, 6080), (17, 6125), (20, 6149), (22, 6236), (23, 6254), (24, 6275), (27, 6317), (30, 6446), (34, 6557), (37, 6620), (42, 6728), (45, 6908), (47, 6968), (49, 6998), (50, 7007), (51, 7010), (52, 7016), (55, 7067), (56, 7082), (57, 7085), (59, 7094), (60, 7154), (61, 7178), (62, 7223), (63, 7253), (64, 7256), (67, 7322), (71, 7379), (72, 7382),

Gene: FlyingTortilla_14 Start: 6945, Stop: 8417, Start Num: 4

Candidate Starts for FlyingTortilla_14:

(Start: 4 @6945 has 9 MA's), (6, 6960), (7, 6975), (8, 6984), (9, 7020), (10, 7023), (15, 7107), (16, 7146), (17, 7152), (18, 7161), (19, 7170), (20, 7176), (23, 7281), (25, 7308), (27, 7344), (30, 7473), (31, 7479), (32, 7497), (34, 7584), (37, 7647), (41, 7734), (42, 7755), (44, 7929), (45, 7935), (48, 7998), (49, 8025), (50, 8034), (52, 8043), (56, 8109), (57, 8112), (59, 8121), (61, 8205), (62, 8250), (63, 8280), (64, 8283), (66, 8316), (67, 8349), (68, 8352),

Gene: FruityLoops_13 Start: 6854, Stop: 8326, Start Num: 4

Candidate Starts for FruityLoops_13:

(Start: 4 @6854 has 9 MA's), (6, 6869), (7, 6884), (8, 6893), (9, 6929), (10, 6932), (15, 7016), (16, 7055), (17, 7061), (18, 7070), (19, 7079), (20, 7085), (23, 7190), (25, 7217), (27, 7253), (30, 7382), (32, 7406), (34, 7493), (37, 7556), (41, 7643), (42, 7664), (44, 7838), (45, 7844), (48, 7907), (49, 7934), (50, 7943), (52, 7952), (56, 8018), (57, 8021), (59, 8030), (61, 8114), (62, 8159), (63, 8189), (64, 8192), (66, 8225), (67, 8258), (68, 8261), (71, 8315), (72, 8318),

Gene: Gray_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Gray_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Hanem_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Hanem_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Kabocha_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Kabocha_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (72, 7629),

Gene: Lenoshki_16 Start: 5761, Stop: 7263, Start Num: 2

Candidate Starts for Lenoshki_16:

(1, 5680), (2, 5761), (Start: 4 @5791 has 9 MA's), (6, 5806), (7, 5821), (10, 5869), (11, 5881), (12, 5923), (14, 5935), (15, 5953), (17, 5998), (20, 6022), (22, 6109), (23, 6127), (24, 6148), (27, 6190), (30, 6319), (34, 6430), (37, 6493), (42, 6601), (45, 6781), (47, 6841), (49, 6871), (50, 6880), (51, 6883), (52, 6889), (55, 6940), (56, 6955), (57, 6958), (59, 6967), (61, 7051), (62, 7096), (63, 7126), (64, 7129), (67, 7195), (71, 7252),

Gene: Mikronejon_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Mikronejon_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: MintFritos_16 Start: 6165, Stop: 7637, Start Num: 4

Candidate Starts for MintFritos_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Oogie_16 Start: 5791, Stop: 7263, Start Num: 4

Candidate Starts for Oogie_16:

(1, 5680), (2, 5761), (Start: 4 @5791 has 9 MA's), (6, 5806), (7, 5821), (10, 5869), (11, 5881), (12, 5923), (14, 5935), (15, 5953), (17, 5998), (20, 6022), (22, 6109), (23, 6127), (24, 6148), (27, 6190), (30, 6319), (34, 6430), (37, 6493), (42, 6601), (44, 6775), (45, 6781), (47, 6841), (49, 6871), (50, 6880), (52, 6889), (55, 6940), (56, 6955), (57, 6958), (59, 6967), (61, 7051), (62, 7096), (63, 7126), (64, 7129), (67, 7195),

Gene: Pakusa_16 Start: 5907, Stop: 7379, Start Num: 4

Candidate Starts for Pakusa_16:

(Start: 3 @5898 has 5 MA's), (Start: 4 @5907 has 9 MA's), (6, 5922), (7, 5937), (10, 5985), (11, 5997), (12, 6039), (13, 6045), (15, 6069), (17, 6114), (20, 6138), (22, 6225), (23, 6243), (24, 6264), (27, 6306), (30, 6435), (32, 6459), (34, 6546), (37, 6609), (42, 6717), (45, 6897), (47, 6957), (49, 6987), (50, 6996), (51, 6999), (52, 7005), (55, 7056), (56, 7071), (57, 7074), (59, 7083), (60, 7143), (61, 7167), (62, 7212), (63, 7242), (64, 7245), (67, 7311), (71, 7368), (72, 7371),

Gene: ScarletRaider_14 Start: 6972, Stop: 8444, Start Num: 4

Candidate Starts for ScarletRaider_14:

(Start: 4 @6972 has 9 MA's), (6, 6987), (7, 7002), (8, 7011), (9, 7047), (10, 7050), (15, 7134), (16, 7173), (17, 7179), (18, 7188), (19, 7197), (20, 7203), (23, 7308), (25, 7335), (27, 7371), (30, 7500), (31, 7506), (32, 7524), (34, 7611), (37, 7674), (41, 7761), (42, 7782), (44, 7956), (45, 7962), (48, 8025), (49, 8052), (50, 8061), (52, 8070), (56, 8136), (57, 8139), (59, 8148), (61, 8232), (62, 8277), (63, 8307), (64, 8310), (66, 8343), (67, 8376), (68, 8379),

Gene: Schomber_15 Start: 5894, Stop: 7366, Start Num: 4

Candidate Starts for Schomber_15:

(1, 5783), (2, 5864), (Start: 4 @5894 has 9 MA's), (6, 5909), (7, 5924), (10, 5972), (11, 5984), (12, 6026), (15, 6056), (17, 6101), (20, 6125), (22, 6212), (23, 6230), (24, 6251), (27, 6293), (30, 6422), (32, 6446), (34, 6533), (37, 6596), (42, 6704), (45, 6884), (47, 6944), (49, 6974), (50, 6983), (51, 6986), (52, 6992), (55, 7043), (56, 7058), (57, 7061), (59, 7070), (60, 7130), (61, 7154), (62, 7199), (63, 7229), (64, 7232), (67, 7298), (71, 7355), (72, 7358),

Gene: Thales_10 Start: 4511, Stop: 5971, Start Num: 5

Candidate Starts for Thales_10:

(Start: 5 @4511 has 1 MA's), (7, 4532), (8, 4541), (11, 4592), (12, 4634), (13, 4640), (15, 4664), (16, 4703), (17, 4709), (18, 4718), (20, 4733), (21, 4799), (24, 4859), (26, 4886), (27, 4901), (28, 5000), (29, 5012), (33, 5126), (36, 5192), (37, 5204), (38, 5246), (39, 5252), (40, 5261), (43, 5369), (45, 5489), (46, 5504), (47, 5549), (53, 5627), (54, 5630), (58, 5669), (59, 5675), (63, 5834), (65, 5861), (67, 5903), (68, 5906), (70, 5942), (73, 5966),

Gene: Toneprano_16 Start: 6156, Stop: 7637, Start Num: 3

Candidate Starts for Toneprano_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (13, 6303), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: Twin_16 Start: 6165, Stop: 7637, Start Num: 4

Candidate Starts for Twin_16:

(Start: 3 @6156 has 5 MA's), (Start: 4 @6165 has 9 MA's), (6, 6180), (7, 6195), (10, 6243), (11, 6255), (12, 6297), (14, 6309), (15, 6327), (17, 6372), (20, 6396), (22, 6483), (23, 6501), (24, 6522), (27, 6564), (30, 6693), (32, 6717), (34, 6804), (37, 6867), (42, 6975), (45, 7155), (47, 7215), (49, 7245), (50, 7254), (51, 7257), (52, 7263), (55, 7314), (56, 7329), (57, 7332), (59, 7341), (60, 7401), (61, 7425), (62, 7470), (63, 7500), (64, 7503), (67, 7569), (71, 7626), (72, 7629),

Gene: UBSmoodge_15 Start: 7342, Stop: 8814, Start Num: 4

Candidate Starts for UBSmoodge_15:

(Start: 4 @7342 has 9 MA's), (6, 7357), (7, 7372), (8, 7381), (9, 7417), (10, 7420), (15, 7504), (16, 7543), (17, 7549), (18, 7558), (19, 7567), (20, 7573), (23, 7678), (25, 7705), (27, 7741), (30, 7870), (31, 7876), (32, 7894), (34, 7981), (37, 8044), (41, 8131), (42, 8152), (44, 8326), (45, 8332), (48, 8395), (49, 8422), (50, 8431), (52, 8440), (56, 8506), (57, 8509), (59, 8518), (61, 8602), (62, 8647), (63, 8677), (64, 8680), (66, 8713), (67, 8746), (68, 8749), (71, 8803), (72, 8806),