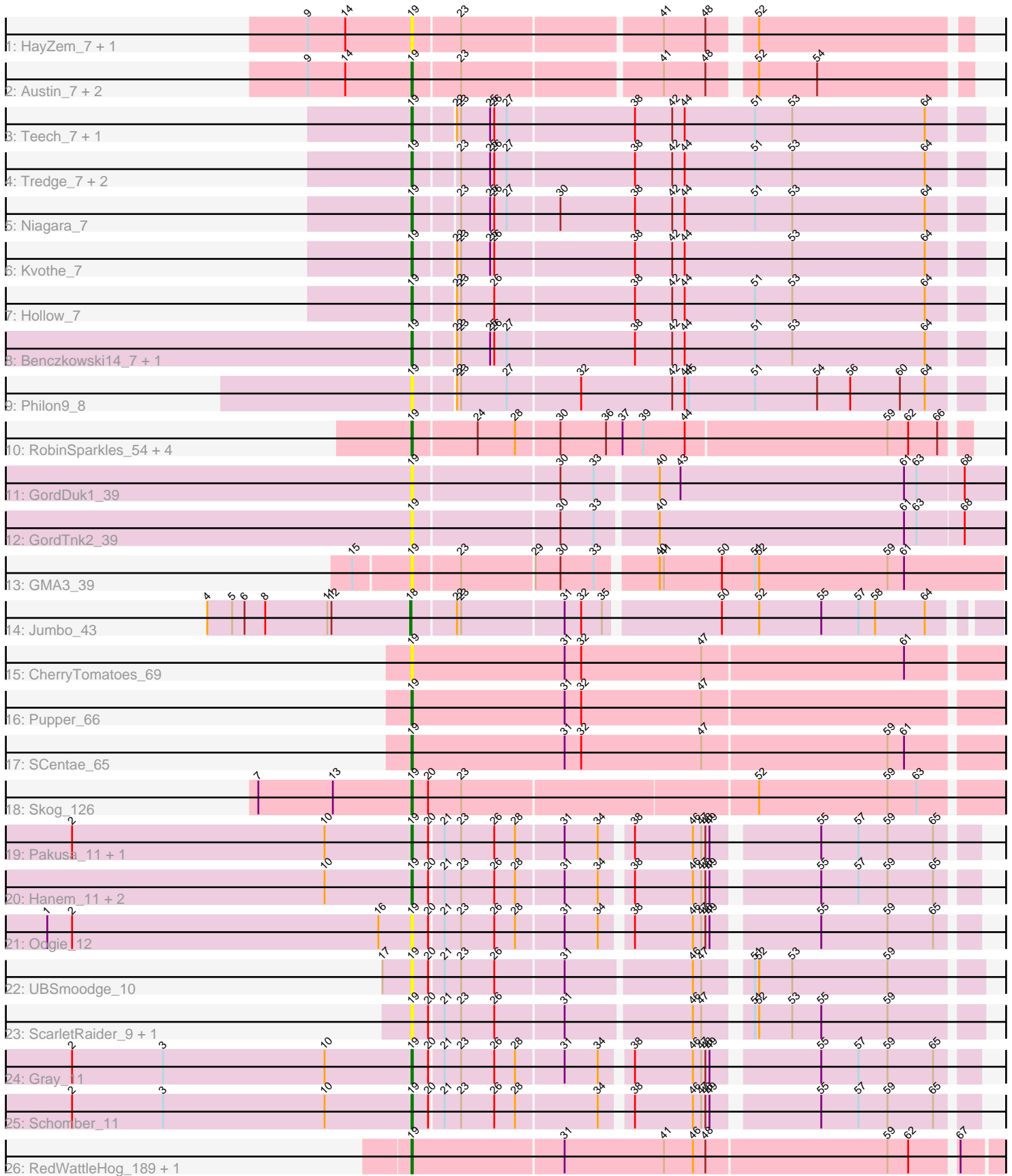


Pham 86016



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 86016 Report

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

Pham number 86016 has 42 members, 15 are drafts.

Phages represented in each track:

- Track 1 : HayZem_7, GMA7_100
- Track 2 : Austin_7, Amore2_7, GTE7_100
- Track 3 : Teech_7, Demosthenes_7
- Track 4 : Tredge_7, ASerpRocky_7, Teatealatte_7
- Track 5 : Niagara_7
- Track 6 : Kvothe_7
- Track 7 : Hollow_7
- Track 8 : Benczkowski14_7, Katyusha_7
- Track 9 : Philon9_8
- Track 10 : RobinSparkles_54, Orchid_50, Gibbles_49, Kampe_51, PatrickStar_51
- Track 11 : GordDuk1_39
- Track 12 : GordTnk2_39
- Track 13 : GMA3_39
- Track 14 : Jumbo_43
- Track 15 : CherryTomatoes_69
- Track 16 : Pupper_66
- Track 17 : SCentae_65
- Track 18 : Skog_126
- Track 19 : Pakusa_11, Chidiebere_11
- Track 20 : Hanem_11, Kabocha_11, Alok_11
- Track 21 : Oogie_12
- Track 22 : UBSmoodge_10
- Track 23 : ScarletRaider_9, FlyingTortilla_9
- Track 24 : Gray_11
- Track 25 : Schomber_11
- Track 26 : RedWattleHog_189, Stormageddon_190

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

The start number called the most often in the published annotations is 19, it was called in 26 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky_7, Alok1_11, Amore2_7, Austin_7, Benczkowski14_7, CherryTomatoes_69, Chidiebere_11, Demosthenes_7, FlyingTortilla_9, GMA3_39, GMA7_100, GTE7_100, Gibbles_49, GordDuk1_39, GordTnk2_39, Gray_11, Hanem_11, HayZem_7, Hollow_7, Kabocha_11, Kampe_51, Katyusha_7, Kvothe_7, Niagara_7, Oogie_12, Orchid_50, Pakusa_11, PatrickStar_51, Philon9_8, Pupper_66, RedWattleHog_189, RobinSparkles_54, SCentae_65, ScarletRaider_9, Schomber_11, Skog_126, Stormageddon_190, Teatealatte_7, Teech_7, Tredge_7, UBSmoodge_10,

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

-

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

- Jumbo_43,

Summary by start number:

Start 18:

- Found in 1 of 42 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo_43 (DF3),

Start 19:

- Found in 41 of 42 (97.6%) of genes in pham
- Manual Annotations of this start: 26 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_7 (CS4), Alok1_11 (DQ), Amore2_7 (CS1), Austin_7 (CS1), Benczkowski14_7 (CS4), CherryTomatoes_69 (DO), Chidiebere_11 (DQ), Demosthenes_7 (CS4), FlyingTortilla_9 (DQ), GMA3_39 (DF2), GMA7_100 (CS1), GTE7_100 (CS1), Gibbles_49 (CX), GordDuk1_39 (DF1), GordTnk2_39 (DF1), Gray_11 (DQ), Hanem_11 (DQ), HayZem_7 (CS1), Hollow_7 (CS4), Kabocha_11 (DQ), Kampe_51 (CX), Katyusha_7 (CS4), Kvothe_7 (CS4), Niagara_7 (CS4), Oogie_12 (DQ), Orchid_50 (CX), Pakusa_11 (DQ), PatrickStar_51 (CX), Philon9_8 (CS4), Pupper_66 (DO), RedWattleHog_189 (DX), RobinSparkles_54 (CX), SCentae_65 (DO), ScarletRaider_9 (DQ), Schomber_11 (DQ), Skog_126 (DO), Stormageddon_190 (DX), Teatealatte_7 (CS4), Teech_7 (CS4), Tredge_7 (CS4), UBSmoodge_10 (DQ),

Summary by clusters:

There are 9 clusters represented in this pham: DO, DF1, DF3, DF2, CX, DX, CS4, CS1, DQ,

Info for manual annotations of cluster CS1:

- Start number 19 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS4:

- Start number 19 was manually annotated 9 times for cluster CS4.

Info for manual annotations of cluster CX:

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

Info for manual annotations of cluster DF3:

- Start number 18 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DO:

- Start number 19 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DQ:

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

Info for manual annotations of cluster DX:

- Start number 19 was manually annotated 2 times for cluster DX.

Gene Information:

Gene: ASerpRocky_7 Start: 6288, Stop: 5890, Start Num: 19

Candidate Starts for ASerpRocky_7:

(Start: 19 @6288 has 26 MA's), (23, 6258), (25, 6237), (26, 6234), (27, 6225), (38, 6135), (42, 6108), (44, 6099), (51, 6048), (53, 6021), (64, 5925),

Gene: Alok1_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Alok1_11:

(10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (31, 4849), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: Amore2_7 Start: 4701, Stop: 4327, Start Num: 19

Candidate Starts for Amore2_7:

(9, 4776), (14, 4749), (Start: 19 @4701 has 26 MA's), (23, 4668), (41, 4530), (48, 4500), (52, 4473), (54, 4431),

Gene: Austin_7 Start: 4701, Stop: 4327, Start Num: 19

Candidate Starts for Austin_7:

(9, 4776), (14, 4749), (Start: 19 @4701 has 26 MA's), (23, 4668), (41, 4530), (48, 4500), (52, 4473), (54, 4431),

Gene: Benczkowski14_7 Start: 6351, Stop: 5953, Start Num: 19

Candidate Starts for Benczkowski14_7:

(Start: 19 @6351 has 26 MA's), (22, 6324), (23, 6321), (25, 6300), (26, 6297), (27, 6288), (38, 6198), (42, 6171), (44, 6162), (51, 6111), (53, 6084), (64, 5988),

Gene: CherryTomatoes_69 Start: 23017, Stop: 23448, Start Num: 19

Candidate Starts for CherryTomatoes_69:

(Start: 19 @23017 has 26 MA's), (31, 23128), (32, 23140), (47, 23227), (61, 23371),

Gene: Chidiebere_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Chidiebere_11:

(2, 4498), (10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (31, 4849), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: Demosthenes_7 Start: 6248, Stop: 5850, Start Num: 19

Candidate Starts for Demosthenes_7:

(Start: 19 @6248 has 26 MA's), (22, 6221), (23, 6218), (25, 6197), (26, 6194), (27, 6185), (38, 6095), (42, 6068), (44, 6059), (51, 6008), (53, 5981), (64, 5885),

Gene: FlyingTortilla_9 Start: 5210, Stop: 5593, Start Num: 19

Candidate Starts for FlyingTortilla_9:

(Start: 19 @5210 has 26 MA's), (20, 5222), (21, 5231), (23, 5243), (26, 5267), (31, 5315), (46, 5402), (47, 5408), (51, 5435), (52, 5438), (53, 5462), (55, 5483), (59, 5531),

Gene: GMA3_39 Start: 41243, Stop: 40830, Start Num: 19

Candidate Starts for GMA3_39:

(15, 41282), (Start: 19 @41243 has 26 MA's), (23, 41210), (29, 41159), (30, 41141), (33, 41117), (40, 41078), (41, 41075), (50, 41033), (51, 41009), (52, 41006), (59, 40913), (61, 40901),

Gene: GMA7_100 Start: 72309, Stop: 71935, Start Num: 19

Candidate Starts for GMA7_100:

(9, 72384), (14, 72357), (Start: 19 @72309 has 26 MA's), (23, 72276), (41, 72138), (48, 72108), (52, 72081),

Gene: GTE7_100 Start: 73306, Stop: 72932, Start Num: 19

Candidate Starts for GTE7_100:

(9, 73381), (14, 73354), (Start: 19 @73306 has 26 MA's), (23, 73273), (41, 73135), (48, 73105), (52, 73078), (54, 73036),

Gene: Gibbles_49 Start: 45750, Stop: 45352, Start Num: 19

Candidate Starts for Gibbles_49:

(Start: 19 @45750 has 26 MA's), (24, 45705), (28, 45678), (30, 45648), (36, 45615), (37, 45603), (39, 45588), (44, 45558), (59, 45414), (62, 45399), (66, 45378),

Gene: GordDuk1_39 Start: 40161, Stop: 39736, Start Num: 19

Candidate Starts for GordDuk1_39:

(Start: 19 @40161 has 26 MA's), (30, 40059), (33, 40035), (40, 39993), (43, 39978), (61, 39816), (63, 39807), (68, 39774),

Gene: GordTnk2_39 Start: 40127, Stop: 39702, Start Num: 19

Candidate Starts for GordTnk2_39:

(Start: 19 @40127 has 26 MA's), (30, 40025), (33, 40001), (40, 39959), (61, 39782), (63, 39773), (68, 39740),

Gene: Gray_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Gray_11:

(2, 4498), (3, 4564), (10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (31, 4849), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: Hanem_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Hanem_11:

(10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (31, 4849), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: HayZem_7 Start: 4701, Stop: 4327, Start Num: 19

Candidate Starts for HayZem_7:

(9, 4776), (14, 4749), (Start: 19 @4701 has 26 MA's), (23, 4668), (41, 4530), (48, 4500), (52, 4473),

Gene: Hollow_7 Start: 6286, Stop: 5888, Start Num: 19

Candidate Starts for Hollow_7:

(Start: 19 @6286 has 26 MA's), (22, 6259), (23, 6256), (26, 6232), (38, 6133), (42, 6106), (44, 6097), (51, 6046), (53, 6019), (64, 5923),

Gene: Jumbo_43 Start: 45858, Stop: 45460, Start Num: 18

Candidate Starts for Jumbo_43:

(4, 46005), (5, 45987), (6, 45978), (8, 45963), (11, 45918), (12, 45915), (Start: 18 @45858 has 1 MA's), (22, 45828), (23, 45825), (31, 45753), (32, 45741), (35, 45726), (50, 45648), (52, 45621), (55, 45576), (57, 45549), (58, 45537), (64, 45501),

Gene: Kabocha_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Kabocha_11:

(10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (31, 4849), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: Kampe_51 Start: 45728, Stop: 45339, Start Num: 19

Candidate Starts for Kampe_51:

(Start: 19 @45728 has 26 MA's), (24, 45683), (28, 45656), (30, 45626), (36, 45593), (37, 45581), (39, 45566), (44, 45536), (59, 45392), (62, 45377), (66, 45356),

Gene: Katyusha_7 Start: 6351, Stop: 5953, Start Num: 19

Candidate Starts for Katyusha_7:

(Start: 19 @6351 has 26 MA's), (22, 6324), (23, 6321), (25, 6300), (26, 6297), (27, 6288), (38, 6198), (42, 6171), (44, 6162), (51, 6111), (53, 6084), (64, 5988),

Gene: Kvothe_7 Start: 6288, Stop: 5890, Start Num: 19

Candidate Starts for Kvothe_7:

(Start: 19 @6288 has 26 MA's), (22, 6261), (23, 6258), (25, 6237), (26, 6234), (38, 6135), (42, 6108), (44, 6099), (53, 6021), (64, 5925),

Gene: Niagara_7 Start: 6308, Stop: 5910, Start Num: 19

Candidate Starts for Niagara_7:

(Start: 19 @6308 has 26 MA's), (23, 6278), (25, 6257), (26, 6254), (27, 6245), (30, 6209), (38, 6155), (42, 6128), (44, 6119), (51, 6068), (53, 6041), (64, 5945),

Gene: Oogie_12 Start: 4641, Stop: 5018, Start Num: 19

Candidate Starts for Oogie_12:

(1, 4377), (2, 4395), (16, 4617), (Start: 19 @4641 has 26 MA's), (20, 4653), (21, 4662), (23, 4674), (26, 4698), (28, 4713), (31, 4746), (34, 4770), (38, 4788), (46, 4830), (47, 4836), (48, 4839), (49, 4842), (55, 4911), (59, 4959), (65, 4992),

Gene: Orchid_50 Start: 45729, Stop: 45340, Start Num: 19

Candidate Starts for Orchid_50:

(Start: 19 @45729 has 26 MA's), (24, 45684), (28, 45657), (30, 45627), (36, 45594), (37, 45582), (39, 45567), (44, 45537), (59, 45393), (62, 45378), (66, 45357),

Gene: Pakusa_11 Start: 4486, Stop: 4863, Start Num: 19

Candidate Starts for Pakusa_11:

(2, 4240), (10, 4423), (Start: 19 @4486 has 26 MA's), (20, 4498), (21, 4507), (23, 4519), (26, 4543), (28, 4558), (31, 4591), (34, 4615), (38, 4633), (46, 4675), (47, 4681), (48, 4684), (49, 4687), (55, 4756), (57, 4783), (59, 4804), (65, 4837),

Gene: PatrickStar_51 Start: 45728, Stop: 45339, Start Num: 19

Candidate Starts for PatrickStar_51:

(Start: 19 @45728 has 26 MA's), (24, 45683), (28, 45656), (30, 45626), (36, 45593), (37, 45581), (39, 45566), (44, 45536), (59, 45392), (62, 45377), (66, 45356),

Gene: Philon9_8 Start: 5848, Stop: 5450, Start Num: 19

Candidate Starts for Philon9_8:

(Start: 19 @5848 has 26 MA's), (22, 5821), (23, 5818), (27, 5785), (32, 5734), (42, 5668), (44, 5659), (45, 5656), (51, 5608), (54, 5563), (56, 5539), (60, 5503), (64, 5485),

Gene: Pupper_66 Start: 23119, Stop: 23550, Start Num: 19

Candidate Starts for Pupper_66:

(Start: 19 @23119 has 26 MA's), (31, 23230), (32, 23242), (47, 23329),

Gene: RedWattleHog_189 Start: 116973, Stop: 117386, Start Num: 19

Candidate Starts for RedWattleHog_189:

(Start: 19 @116973 has 26 MA's), (31, 117081), (41, 117153), (46, 117174), (48, 117183), (59, 117312), (62, 117327), (67, 117357),

Gene: RobinSparkles_54 Start: 46281, Stop: 45892, Start Num: 19

Candidate Starts for RobinSparkles_54:

(Start: 19 @46281 has 26 MA's), (24, 46236), (28, 46209), (30, 46179), (36, 46146), (37, 46134), (39, 46119), (44, 46089), (59, 45945), (62, 45930), (66, 45909),

Gene: SCentae_65 Start: 22873, Stop: 23304, Start Num: 19

Candidate Starts for SCentae_65:

(Start: 19 @22873 has 26 MA's), (31, 22984), (32, 22996), (47, 23083), (59, 23215), (61, 23227),

Gene: ScarletRaider_9 Start: 5240, Stop: 5623, Start Num: 19

Candidate Starts for ScarletRaider_9:

(Start: 19 @5240 has 26 MA's), (20, 5252), (21, 5261), (23, 5273), (26, 5297), (31, 5345), (46, 5432), (47, 5438), (51, 5465), (52, 5468), (53, 5492), (55, 5513), (59, 5561),

Gene: Schomber_11 Start: 4744, Stop: 5121, Start Num: 19

Candidate Starts for Schomber_11:

(2, 4498), (3, 4564), (10, 4681), (Start: 19 @4744 has 26 MA's), (20, 4756), (21, 4765), (23, 4777), (26, 4801), (28, 4816), (34, 4873), (38, 4891), (46, 4933), (47, 4939), (48, 4942), (49, 4945), (55, 5014), (57, 5041), (59, 5062), (65, 5095),

Gene: Skog_126 Start: 51770, Stop: 52195, Start Num: 19

Candidate Starts for Skog_126:

(7, 51659), (13, 51713), (Start: 19 @51770 has 26 MA's), (20, 51782), (23, 51806), (52, 52013), (59, 52106), (63, 52127),

Gene: Stormageddon_190 Start: 117920, Stop: 118333, Start Num: 19

Candidate Starts for Stormageddon_190:

(Start: 19 @117920 has 26 MA's), (31, 118028), (41, 118100), (46, 118121), (48, 118130), (59, 118259), (62, 118274), (67, 118304),

Gene: Teatealatte_7 Start: 6271, Stop: 5873, Start Num: 19

Candidate Starts for Teatealatte_7:

(Start: 19 @6271 has 26 MA's), (23, 6241), (25, 6220), (26, 6217), (27, 6208), (38, 6118), (42, 6091), (44, 6082), (51, 6031), (53, 6004), (64, 5908),

Gene: Teech_7 Start: 6343, Stop: 5945, Start Num: 19

Candidate Starts for Teech_7:

(Start: 19 @6343 has 26 MA's), (22, 6316), (23, 6313), (25, 6292), (26, 6289), (27, 6280), (38, 6190), (42, 6163), (44, 6154), (51, 6103), (53, 6076), (64, 5980),

Gene: Tredge_7 Start: 6271, Stop: 5873, Start Num: 19

Candidate Starts for Tredge_7:

(Start: 19 @6271 has 26 MA's), (23, 6241), (25, 6220), (26, 6217), (27, 6208), (38, 6118), (42, 6091), (44, 6082), (51, 6031), (53, 6004), (64, 5908),

Gene: UBSmoodge_10 Start: 5613, Stop: 5996, Start Num: 19

Candidate Starts for UBSmoodge_10:

(17, 5592), (Start: 19 @5613 has 26 MA's), (20, 5625), (21, 5634), (23, 5646), (26, 5670), (31, 5718), (46, 5805), (47, 5811), (51, 5838), (52, 5841), (53, 5865), (59, 5934),