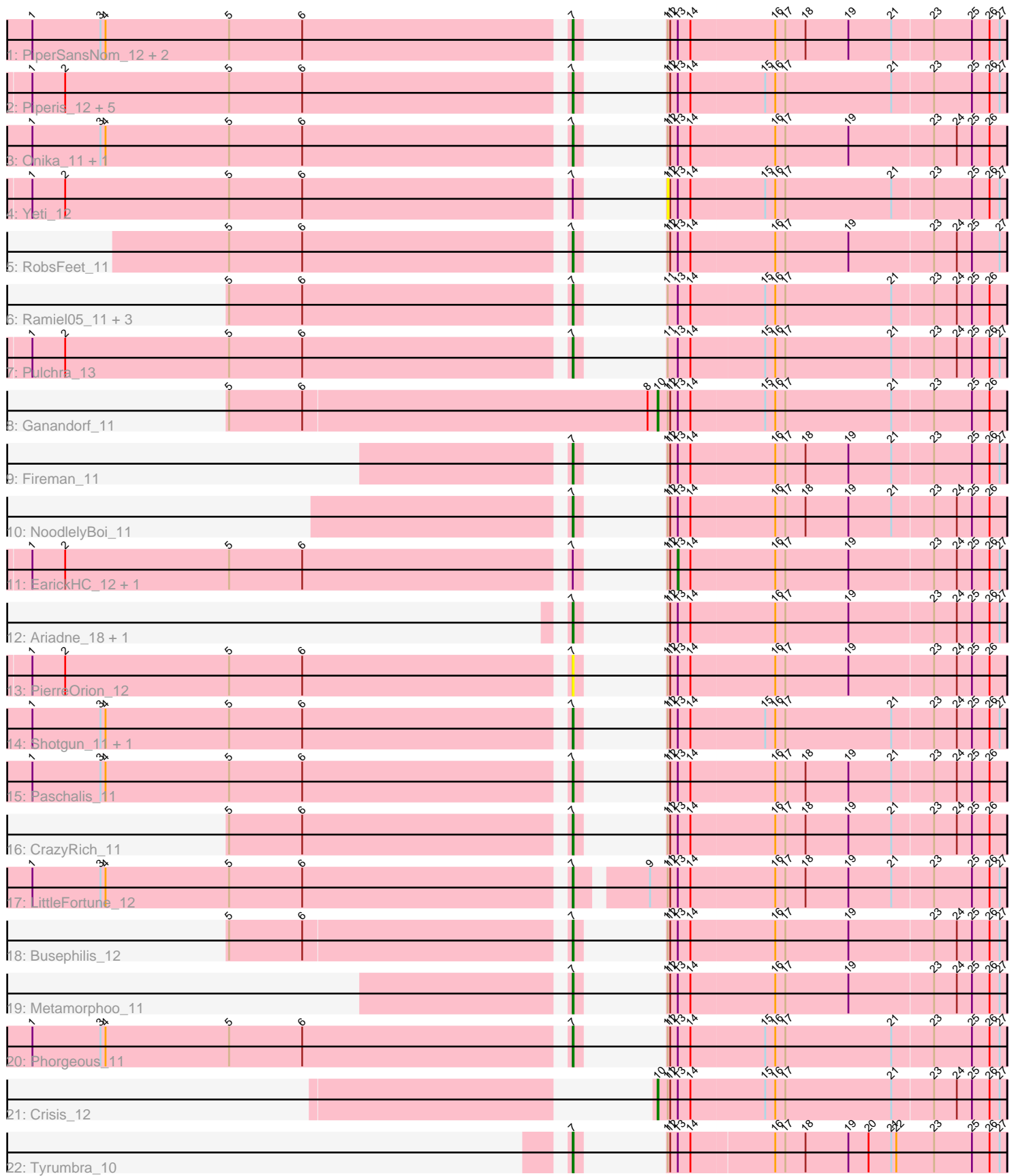


Pham 2827



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 2827 Report

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

Pham number 2827 has 36 members, 4 are drafts.

Phages represented in each track:

- Track 1 : PiperSansNom_12, Jollipop_11, Hermeonysus_11
- Track 2 : Piperis_12, Selwyn23_13, Cranjis_12, Honeyfin_13, Phrancesco_13, Scumberland_13
- Track 3 : Onika_11, Antares_12
- Track 4 : Yeti_12
- Track 5 : RobsFeet_11
- Track 6 : Ramiel05_11, Kowalski_11, Savannah_11, BrazzalePHS_11
- Track 7 : Pulchra_13
- Track 8 : Ganandorf_11
- Track 9 : Fireman_11
- Track 10 : NoodlelyBoi_11
- Track 11 : EarickHC_12, KaiHaiDragon_12
- Track 12 : Ariadne_18, Smarties_18
- Track 13 : PierreOrion_12
- Track 14 : Shotgun_11, Jefe_12
- Track 15 : Paschalis_11
- Track 16 : CrazyRich_11
- Track 17 : LittleFortune_12
- Track 18 : Busephilis_12
- Track 19 : Metamorphoo_11
- Track 20 : Phorgeous_11
- Track 21 : Crisis_12
- Track 22 : Tyumbra_10

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 28 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_12, Ariadne_18, BrazzalePHS_11, Busephilis_12, Cranjis_12, CrazyRich_11, Fireman_11, Hermeonysus_11, Honeyfin_13, Jefe_12, Jollipop_11, Kowalski_11, LittleFortune_12, Metamorphoo_11, NoodlelyBoi_11, Onika_11, Paschalis_11, Phorgeous_11, Phrancesco_13, PierreOrion_12, PiperSansNom_12,

Piperis_12, Pulchra_13, Ramiel05_11, RobsFeet_11, Savannah_11,
Scumberland_13, Selwyn23_13, Shotgun_11, Smarties_18, Tyrumbra_10,

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

- EarickHC_12, KaiHaiDragon_12, Yeti_12,

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

- Crisis_12, Ganandorf_11,

Summary by start number:

Start 7:

- Found in 34 of 36 (94.4%) of genes in pham
- Manual Annotations of this start: 28 of 32
- Called 91.2% of time when present
- Phage (with cluster) where this start called: Antares_12 (EC), Ariadne_18 (EC), BrazzalePHS_11 (EC), Busephilis_12 (EC), Cranjis_12 (EC), CrazyRich_11 (EC), Fireman_11 (EC), Hermeonysus_11 (EC), Honeyfin_13 (EC), Jefe_12 (EC), Jollipop_11 (EC), Kowalski_11 (EC), LittleFortune_12 (EC), Metamorphoo_11 (EC), NoodlelyBoi_11 (EC), Onika_11 (EC), Paschalis_11 (EC), Phorgeous_11 (EC), Phrancesco_13 (EC), PierreOrion_12 (EC), PiperSansNom_12 (EC), Piperis_12 (EC), Pulchra_13 (EC), Ramiel05_11 (EC), RobsFeet_11 (EC), Savannah_11 (EC), Scumberland_13 (EC), Selwyn23_13 (EC), Shotgun_11 (EC), Smarties_18 (EC), Tyrumbra_10 (EC),

Start 10:

- Found in 2 of 36 (5.6%) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crisis_12 (EC), Ganandorf_11 (EC),

Start 11:

- Found in 36 of 36 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 2.8% of time when present
- Phage (with cluster) where this start called: Yeti_12 (EC),

Start 13:

- Found in 36 of 36 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 5.6% of time when present
- Phage (with cluster) where this start called: EarickHC_12 (EC), KaiHaiDragon_12 (EC),

Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:

- Start number 7 was manually annotated 28 times for cluster EC.
- Start number 10 was manually annotated 2 times for cluster EC.
- Start number 13 was manually annotated 2 times for cluster EC.

Gene Information:

Gene: Antares_12 Start: 5401, Stop: 5811, Start Num: 7

Candidate Starts for Antares_12:

(1, 4777), (3, 4858), (4, 4864), (5, 5011), (6, 5098), (Start: 7 @5401 has 28 MA's), (11, 5413), (12, 5416), (Start: 13 @5425 has 2 MA's), (14, 5440), (16, 5539), (17, 5551), (19, 5626), (23, 5725), (24, 5752), (25, 5770), (26, 5791),

Gene: Ariadne_18 Start: 6561, Stop: 6971, Start Num: 7

Candidate Starts for Ariadne_18:

(Start: 7 @6561 has 28 MA's), (11, 6573), (12, 6576), (Start: 13 @6585 has 2 MA's), (14, 6600), (16, 6699), (17, 6711), (19, 6786), (23, 6885), (24, 6912), (25, 6930), (26, 6951), (27, 6963),

Gene: BrazzalePHS_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for BrazzalePHS_11:

(5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (Start: 13 @5213 has 2 MA's), (14, 5228), (15, 5315), (16, 5327), (17, 5339), (21, 5465), (23, 5513), (24, 5540), (25, 5558), (26, 5579),

Gene: Busephilis_12 Start: 5407, Stop: 5817, Start Num: 7

Candidate Starts for Busephilis_12:

(5, 5020), (6, 5107), (Start: 7 @5407 has 28 MA's), (11, 5419), (12, 5422), (Start: 13 @5431 has 2 MA's), (14, 5446), (16, 5545), (17, 5557), (19, 5632), (23, 5731), (24, 5758), (25, 5776), (26, 5797), (27, 5809),

Gene: Cranjis_12 Start: 5353, Stop: 5763, Start Num: 7

Candidate Starts for Cranjis_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (15, 5479), (16, 5491), (17, 5503), (21, 5629), (23, 5677), (25, 5722), (26, 5743), (27, 5755),

Gene: CrazyRich_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for CrazyRich_11:

(5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (12, 5204), (Start: 13 @5213 has 2 MA's), (14, 5228), (16, 5327), (17, 5339), (18, 5363), (19, 5414), (21, 5465), (23, 5513), (24, 5540), (25, 5558), (26, 5579),

Gene: Crisis_12 Start: 5353, Stop: 5763, Start Num: 10

Candidate Starts for Crisis_12:

(Start: 10 @5353 has 2 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (15, 5479), (16, 5491), (17, 5503), (21, 5629), (23, 5677), (24, 5704), (25, 5722), (26, 5743), (27, 5755),

Gene: EarickHC_12 Start: 5377, Stop: 5763, Start Num: 13

Candidate Starts for EarickHC_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (16, 5491), (17, 5503), (19, 5578), (23, 5677), (24, 5704), (25, 5722), (26, 5743), (27, 5755),

Gene: Fireman_11 Start: 4926, Stop: 5336, Start Num: 7

Candidate Starts for Fireman_11:

(Start: 7 @4926 has 28 MA's), (11, 4938), (12, 4941), (Start: 13 @4950 has 2 MA's), (14, 4965), (16, 5064), (17, 5076), (18, 5100), (19, 5151), (21, 5202), (23, 5250), (25, 5295), (26, 5316), (27, 5328),

Gene: Ganandorf_11 Start: 5534, Stop: 5944, Start Num: 10

Candidate Starts for Ganandorf_11:

(5, 5027), (6, 5114), (8, 5522), (Start: 10 @5534 has 2 MA's), (11, 5546), (12, 5549), (Start: 13 @5558 has 2 MA's), (14, 5573), (15, 5660), (16, 5672), (17, 5684), (21, 5810), (23, 5858), (25, 5903), (26, 5924),

Gene: Hermeonysus_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Hermeonysus_11:

(1, 4565), (3, 4646), (4, 4652), (5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (12, 5204), (Start: 13 @5213 has 2 MA's), (14, 5228), (16, 5327), (17, 5339), (18, 5363), (19, 5414), (21, 5465), (23, 5513), (25, 5558), (26, 5579), (27, 5591),

Gene: Honeyfin_13 Start: 5562, Stop: 5972, Start Num: 7

Candidate Starts for Honeyfin_13:

(1, 4938), (2, 4977), (5, 5172), (6, 5259), (Start: 7 @5562 has 28 MA's), (11, 5574), (12, 5577), (Start: 13 @5586 has 2 MA's), (14, 5601), (15, 5688), (16, 5700), (17, 5712), (21, 5838), (23, 5886), (25, 5931), (26, 5952), (27, 5964),

Gene: Jefe_12 Start: 5401, Stop: 5811, Start Num: 7

Candidate Starts for Jefe_12:

(1, 4777), (3, 4858), (4, 4864), (5, 5011), (6, 5098), (Start: 7 @5401 has 28 MA's), (11, 5413), (12, 5416), (Start: 13 @5425 has 2 MA's), (14, 5440), (15, 5527), (16, 5539), (17, 5551), (21, 5677), (23, 5725), (24, 5752), (25, 5770), (26, 5791), (27, 5803),

Gene: Jollipop_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Jollipop_11:

(1, 4565), (3, 4646), (4, 4652), (5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (12, 5204), (Start: 13 @5213 has 2 MA's), (14, 5228), (16, 5327), (17, 5339), (18, 5363), (19, 5414), (21, 5465), (23, 5513), (25, 5558), (26, 5579), (27, 5591),

Gene: KaiHaiDragon_12 Start: 5377, Stop: 5763, Start Num: 13

Candidate Starts for KaiHaiDragon_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (16, 5491), (17, 5503), (19, 5578), (23, 5677), (24, 5704), (25, 5722), (26, 5743), (27, 5755),

Gene: Kowalski_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Kowalski_11:

(5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (Start: 13 @5213 has 2 MA's), (14, 5228), (15, 5315), (16, 5327), (17, 5339), (21, 5465), (23, 5513), (24, 5540), (25, 5558), (26, 5579),

Gene: LittleFortune_12 Start: 5407, Stop: 5898, Start Num: 7

Candidate Starts for LittleFortune_12:

(1, 4783), (3, 4864), (4, 4870), (5, 5017), (6, 5104), (Start: 7 @5407 has 28 MA's), (9, 5479), (11, 5500), (12, 5503), (Start: 13 @5512 has 2 MA's), (14, 5527), (16, 5626), (17, 5638), (18, 5662), (19, 5713), (21, 5764), (23, 5812), (25, 5857), (26, 5878), (27, 5890),

Gene: Metamorphoo_11 Start: 4758, Stop: 5168, Start Num: 7

Candidate Starts for Metamorphoo_11:

(Start: 7 @4758 has 28 MA's), (11, 4770), (12, 4773), (Start: 13 @4782 has 2 MA's), (14, 4797), (16, 4896), (17, 4908), (19, 4983), (23, 5082), (24, 5109), (25, 5127), (26, 5148), (27, 5160),

Gene: NoodlelyBoi_11 Start: 5198, Stop: 5608, Start Num: 7

Candidate Starts for NoodlelyBoi_11:

(Start: 7 @5198 has 28 MA's), (11, 5210), (12, 5213), (Start: 13 @5222 has 2 MA's), (14, 5237), (16, 5336), (17, 5348), (18, 5372), (19, 5423), (21, 5474), (23, 5522), (24, 5549), (25, 5567), (26, 5588),

Gene: Onika_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Onika_11:

(1, 4565), (3, 4646), (4, 4652), (5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (12, 5204), (Start: 13 @5213 has 2 MA's), (14, 5228), (16, 5327), (17, 5339), (19, 5414), (23, 5513), (24, 5540), (25, 5558), (26, 5579),

Gene: Paschalis_11 Start: 5198, Stop: 5608, Start Num: 7

Candidate Starts for Paschalis_11:

(1, 4574), (3, 4655), (4, 4661), (5, 4808), (6, 4895), (Start: 7 @5198 has 28 MA's), (11, 5210), (12, 5213), (Start: 13 @5222 has 2 MA's), (14, 5237), (16, 5336), (17, 5348), (18, 5372), (19, 5423), (21, 5474), (23, 5522), (24, 5549), (25, 5567), (26, 5588),

Gene: Phorgeous_11 Start: 5198, Stop: 5608, Start Num: 7

Candidate Starts for Phorgeous_11:

(1, 4574), (3, 4655), (4, 4661), (5, 4808), (6, 4895), (Start: 7 @5198 has 28 MA's), (11, 5210), (12, 5213), (Start: 13 @5222 has 2 MA's), (14, 5237), (15, 5324), (16, 5336), (17, 5348), (21, 5474), (23, 5522), (25, 5567), (26, 5588), (27, 5600),

Gene: Phrancesco_13 Start: 5571, Stop: 5981, Start Num: 7

Candidate Starts for Phrancesco_13:

(1, 4947), (2, 4986), (5, 5181), (6, 5268), (Start: 7 @5571 has 28 MA's), (11, 5583), (12, 5586), (Start: 13 @5595 has 2 MA's), (14, 5610), (15, 5697), (16, 5709), (17, 5721), (21, 5847), (23, 5895), (25, 5940), (26, 5961), (27, 5973),

Gene: PierreOrion_12 Start: 5353, Stop: 5763, Start Num: 7

Candidate Starts for PierreOrion_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (16, 5491), (17, 5503), (19, 5578), (23, 5677), (24, 5704), (25, 5722), (26, 5743),

Gene: PiperSansNom_12 Start: 5502, Stop: 5912, Start Num: 7

Candidate Starts for PiperSansNom_12:

(1, 4878), (3, 4959), (4, 4965), (5, 5112), (6, 5199), (Start: 7 @5502 has 28 MA's), (11, 5514), (12, 5517), (Start: 13 @5526 has 2 MA's), (14, 5541), (16, 5640), (17, 5652), (18, 5676), (19, 5727), (21, 5778), (23, 5826), (25, 5871), (26, 5892), (27, 5904),

Gene: Piperis_12 Start: 5353, Stop: 5763, Start Num: 7

Candidate Starts for Piperis_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (15, 5479), (16, 5491), (17, 5503), (21, 5629), (23, 5677), (25, 5722), (26, 5743), (27, 5755),

Gene: Pulchra_13 Start: 5583, Stop: 5993, Start Num: 7

Candidate Starts for Pulchra_13:

(1, 4959), (2, 4998), (5, 5193), (6, 5280), (Start: 7 @5583 has 28 MA's), (11, 5595), (Start: 13 @5607 has 2 MA's), (14, 5622), (15, 5709), (16, 5721), (17, 5733), (21, 5859), (23, 5907), (24, 5934), (25, 5952), (26, 5973), (27, 5985),

Gene: Ramiel05_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Ramiel05_11:

(5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (Start: 13 @5213 has 2 MA's), (14, 5228), (15, 5315), (16, 5327), (17, 5339), (21, 5465), (23, 5513), (24, 5540), (25, 5558), (26, 5579),

Gene: RobsFeet_11 Start: 4925, Stop: 5335, Start Num: 7

Candidate Starts for RobsFeet_11:

(5, 4535), (6, 4622), (Start: 7 @4925 has 28 MA's), (11, 4937), (12, 4940), (Start: 13 @4949 has 2 MA's), (14, 4964), (16, 5063), (17, 5075), (19, 5150), (23, 5249), (24, 5276), (25, 5294), (27, 5327),

Gene: Savannah_11 Start: 5213, Stop: 5623, Start Num: 7

Candidate Starts for Savannah_11:

(5, 4823), (6, 4910), (Start: 7 @5213 has 28 MA's), (11, 5225), (Start: 13 @5237 has 2 MA's), (14, 5252), (15, 5339), (16, 5351), (17, 5363), (21, 5489), (23, 5537), (24, 5564), (25, 5582), (26, 5603),

Gene: Scumberland_13 Start: 5571, Stop: 5981, Start Num: 7

Candidate Starts for Scumberland_13:

(1, 4947), (2, 4986), (5, 5181), (6, 5268), (Start: 7 @5571 has 28 MA's), (11, 5583), (12, 5586), (Start: 13 @5595 has 2 MA's), (14, 5610), (15, 5697), (16, 5709), (17, 5721), (21, 5847), (23, 5895), (25, 5940), (26, 5961), (27, 5973),

Gene: Selwyn23_13 Start: 5583, Stop: 5993, Start Num: 7

Candidate Starts for Selwyn23_13:

(1, 4959), (2, 4998), (5, 5193), (6, 5280), (Start: 7 @5583 has 28 MA's), (11, 5595), (12, 5598), (Start: 13 @5607 has 2 MA's), (14, 5622), (15, 5709), (16, 5721), (17, 5733), (21, 5859), (23, 5907), (25, 5952), (26, 5973), (27, 5985),

Gene: Shotgun_11 Start: 5189, Stop: 5599, Start Num: 7

Candidate Starts for Shotgun_11:

(1, 4565), (3, 4646), (4, 4652), (5, 4799), (6, 4886), (Start: 7 @5189 has 28 MA's), (11, 5201), (12, 5204), (Start: 13 @5213 has 2 MA's), (14, 5228), (15, 5315), (16, 5327), (17, 5339), (21, 5465), (23, 5513), (24, 5540), (25, 5558), (26, 5579), (27, 5591),

Gene: Smarties_18 Start: 6561, Stop: 6971, Start Num: 7

Candidate Starts for Smarties_18:

(Start: 7 @6561 has 28 MA's), (11, 6573), (12, 6576), (Start: 13 @6585 has 2 MA's), (14, 6600), (16, 6699), (17, 6711), (19, 6786), (23, 6885), (24, 6912), (25, 6930), (26, 6951), (27, 6963),

Gene: Tyrumbra_10 Start: 4637, Stop: 5047, Start Num: 7

Candidate Starts for Tyrumbra_10:

(Start: 7 @4637 has 28 MA's), (11, 4649), (12, 4652), (Start: 13 @4661 has 2 MA's), (14, 4676), (16, 4772), (17, 4784), (18, 4808), (19, 4859), (20, 4883), (21, 4910), (22, 4916), (23, 4961), (25, 5006), (26, 5027), (27, 5039),

Gene: Yeti_12 Start: 5365, Stop: 5763, Start Num: 11

Candidate Starts for Yeti_12:

(1, 4729), (2, 4768), (5, 4963), (6, 5050), (Start: 7 @5353 has 28 MA's), (11, 5365), (12, 5368), (Start: 13 @5377 has 2 MA's), (14, 5392), (15, 5479), (16, 5491), (17, 5503), (21, 5629), (23, 5677), (25, 5722), (26, 5743), (27, 5755),