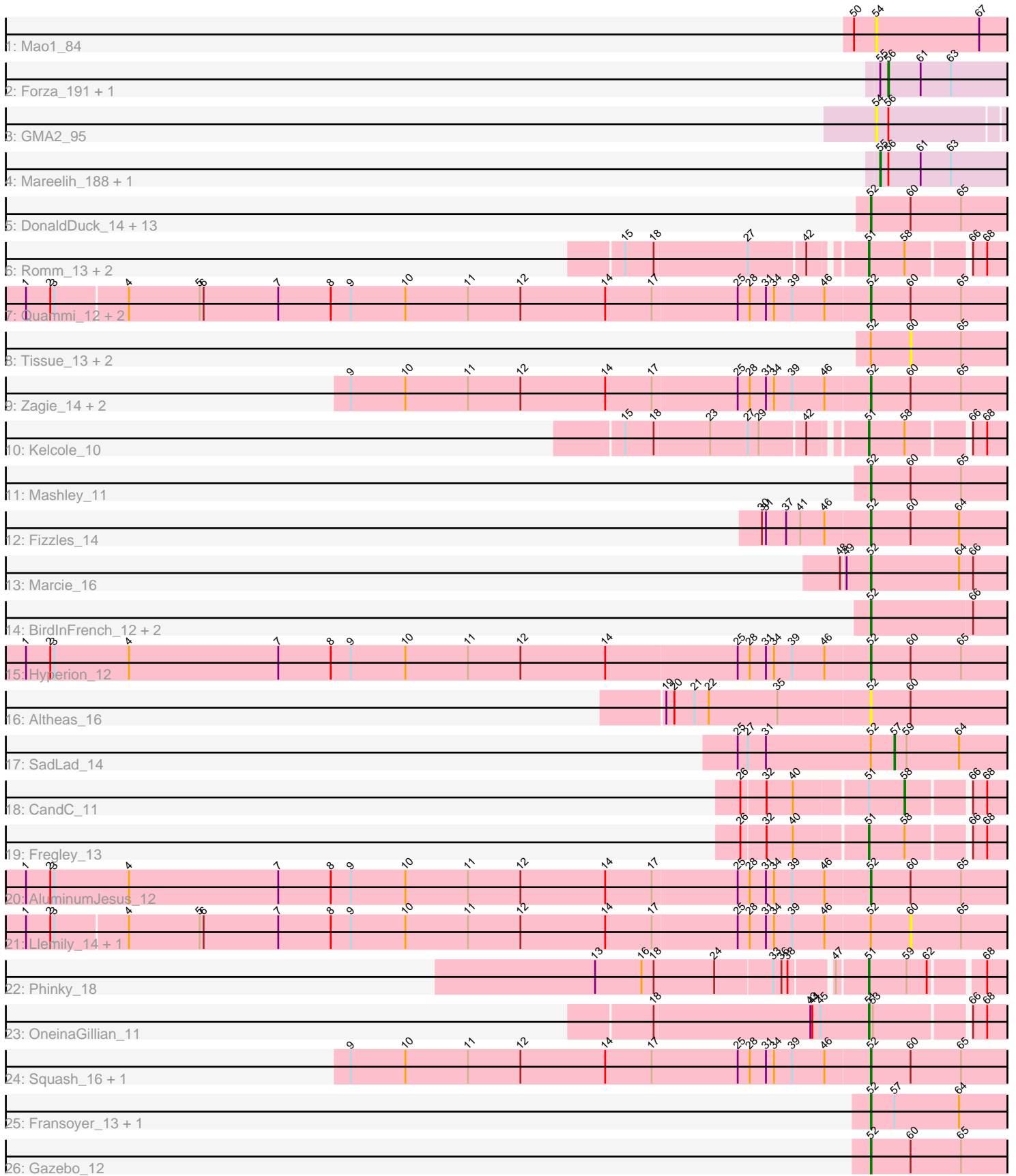


Pham 163649



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 163649 Report

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

Pham number 163649 has 54 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Mao1_84
- Track 2 : Forza_191, BlueNGold_187
- Track 3 : GMA2_95
- Track 4 : Mareelih_188, Boopy_191
- Track 5 : DonaldDuck_14, Phabia_14, Namago_14, BabyDotz_13, Lonelysoil_13, SallyK_15, Casend_15, Wheelie_13, Wayne3_15, Jehoshaphat_16, StrawberryJamm_16, Teehee_16, Grassboy_15, Judebell_16
- Track 6 : Romm_13, Tempo_11, RobinRose_12
- Track 7 : Quammi_12, Rudy_12, Viceroy_13
- Track 8 : Tissue_13, Kyva_17, Zhafia_17
- Track 9 : Zagie_14, Rowlf_11, Blab_12
- Track 10 : Kelcole_10
- Track 11 : Mashley_11
- Track 12 : Fizzles_14
- Track 13 : Marcie_16
- Track 14 : BirdInFrench_12, Pepe25_11, Wilca_12
- Track 15 : Hyperion_12
- Track 16 : Altheas_16
- Track 17 : SadLad_14
- Track 18 : CandC_11
- Track 19 : Fregley_13
- Track 20 : AluminumJesus_12
- Track 21 : Llemily_14, Sillytadpoles_14
- Track 22 : Phinky_18
- Track 23 : OneinaGillian_11
- Track 24 : Squash_16, Nike_15
- Track 25 : Fransoyer_13, RubyRalph_13
- Track 26 : Gazebo_12

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

The start number called the most often in the published annotations is 52, it was called in 28 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altheas_16, AluminumJesus_12, BabyDotz_13, BirdInFrench_12, Blab_12, Casend_15, DonaldDuck_14, Fizzles_14, Fransoyer_13, Gazebo_12, Grassboy_15, Hyperion_12, Jehoshaphat_16, Judebell_16, Lonelysoil_13, Marcie_16, Mashley_11, Namago_14, Nike_15, Pepe25_11, Phabia_14, Quammi_12, Rowlf_11, RubyRalph_13, Rudy_12, SallyK_15, Squash_16, StrawberryJamm_16, Teehee_16, Viceroy_13, Wayne3_15, Wheelie_13, Wilca_12, Zagie_14,

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

- Kyva_17, Llemily_14, SadLad_14, Sillytadpoles_14, Tissue_13, Zhafia_17,

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

- BlueNGold_187, Boopy_191, CandC_11, Forza_191, Fregley_13, GMA2_95, Kelcole_10, Mao1_84, Mareelih_188, OneinaGillian_11, Phinky_18, RobinRose_12, Romm_13, Tempo_11,

Summary by start number:

Start 51:

- Found in 8 of 54 (14.8%) of genes in pham
- Manual Annotations of this start: 6 of 40
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Fregley_13 (EG), Kelcole_10 (EG), OneinaGillian_11 (EG), Phinky_18 (EG), RobinRose_12 (EG), Romm_13 (EG), Tempo_11 (EG),

Start 52:

- Found in 40 of 54 (74.1%) of genes in pham
- Manual Annotations of this start: 28 of 40
- Called 85.0% of time when present
- Phage (with cluster) where this start called: Altheas_16 (EG), AluminumJesus_12 (EG), BabyDotz_13 (EG), BirdInFrench_12 (EG), Blab_12 (EG), Casend_15 (EG), DonaldDuck_14 (EG), Fizzles_14 (EG), Fransoyer_13 (EG), Gazebo_12 (EG), Grassboy_15 (EG), Hyperion_12 (EG), Jehoshaphat_16 (EG), Judebell_16 (EG), Lonelysoil_13 (EG), Marcie_16 (EG), Mashley_11 (EG), Namago_14 (EG), Nike_15 (EG), Pepe25_11 (EG), Phabia_14 (EG), Quammi_12 (EG), Rowlf_11 (EG), RubyRalph_13 (EG), Rudy_12 (EG), SallyK_15 (EG), Squash_16 (EG), StrawberryJamm_16 (EG), Teehee_16 (EG), Viceroy_13 (EG), Wayne3_15 (EG), Wheelie_13 (EG), Wilca_12 (EG), Zagie_14 (EG),

Start 54:

- Found in 2 of 54 (3.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2_95 (DS), Mao1_84 (AD),

Start 55:

- Found in 4 of 54 (7.4%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Boopy_191 (DS), Mareelih_188 (DS),

Start 56:

- Found in 5 of 54 (9.3%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 40.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_187 (DS), Forza_191 (DS),

Start 57:

- Found in 3 of 54 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 33.3% of time when present
- Phage (with cluster) where this start called: SadLad_14 (EG),

Start 58:

- Found in 6 of 54 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 16.7% of time when present
- Phage (with cluster) where this start called: CandC_11 (EG),

Start 60:

- Found in 33 of 54 (61.1%) of genes in pham
- No Manual Annotations of this start.
- Called 15.2% of time when present
- Phage (with cluster) where this start called: Kyva_17 (EG), Llemily_14 (EG), Sillytadpoles_14 (EG), Tissue_13 (EG), Zhafia_17 (EG),

Summary by clusters:

There are 3 clusters represented in this pham: EG, DS, AD,

Info for manual annotations of cluster DS:

- Start number 55 was manually annotated 2 times for cluster DS.
- Start number 56 was manually annotated 2 times for cluster DS.

Info for manual annotations of cluster EG:

- Start number 51 was manually annotated 6 times for cluster EG.
- Start number 52 was manually annotated 28 times for cluster EG.
- Start number 57 was manually annotated 1 time for cluster EG.
- Start number 58 was manually annotated 1 time for cluster EG.

Gene Information:

Gene: Altheas_16 Start: 5368, Stop: 5153, Start Num: 52

Candidate Starts for Altheas_16:

(19, 5665), (20, 5653), (21, 5623), (22, 5602), (35, 5500), (Start: 52 @5368 has 28 MA's), (60, 5311),

Gene: AluminumJesus_12 Start: 4567, Stop: 4352, Start Num: 52

Candidate Starts for AluminumJesus_12:

(1, 5812), (2, 5776), (3, 5770), (4, 5659), (7, 5437), (8, 5359), (9, 5329), (10, 5248), (11, 5155), (12, 5077), (14, 4951), (17, 4882), (25, 4759), (28, 4741), (31, 4717), (34, 4705), (39, 4678), (46, 4630), (Start: 52 @4567 has 28 MA's), (60, 4510), (65, 4435),

Gene: BabyDotz_13 Start: 5024, Stop: 4809, Start Num: 52

Candidate Starts for BabyDotz_13:

(Start: 52 @5024 has 28 MA's), (60, 4967), (65, 4892),

Gene: BirdInFrench_12 Start: 3464, Stop: 3252, Start Num: 52

Candidate Starts for BirdInFrench_12:

(Start: 52 @3464 has 28 MA's), (66, 3317),

Gene: Blab_12 Start: 4349, Stop: 4134, Start Num: 52

Candidate Starts for Blab_12:

(9, 5111), (10, 5030), (11, 4937), (12, 4859), (14, 4733), (17, 4664), (25, 4541), (28, 4523), (31, 4499), (34, 4487), (39, 4460), (46, 4412), (Start: 52 @4349 has 28 MA's), (60, 4292), (65, 4217),

Gene: BlueNGold_187 Start: 109354, Stop: 109548, Start Num: 56

Candidate Starts for BlueNGold_187:

(Start: 55 @109342 has 2 MA's), (Start: 56 @109354 has 2 MA's), (61, 109402), (63, 109447),

Gene: Boopy_191 Start: 109353, Stop: 109559, Start Num: 55

Candidate Starts for Boopy_191:

(Start: 55 @109353 has 2 MA's), (Start: 56 @109365 has 2 MA's), (61, 109413), (63, 109458),

Gene: CandC_11 Start: 3165, Stop: 3016, Start Num: 58

Candidate Starts for CandC_11:

(26, 3390), (32, 3357), (40, 3318), (Start: 51 @3216 has 6 MA's), (Start: 58 @3165 has 1 MA's), (66, 3081), (68, 3060),

Gene: Casend_15 Start: 5321, Stop: 5106, Start Num: 52

Candidate Starts for Casend_15:

(Start: 52 @5321 has 28 MA's), (60, 5264), (65, 5189),

Gene: DonaldDuck_14 Start: 4667, Stop: 4452, Start Num: 52

Candidate Starts for DonaldDuck_14:

(Start: 52 @4667 has 28 MA's), (60, 4610), (65, 4535),

Gene: Fizzles_14 Start: 4739, Stop: 4524, Start Num: 52

Candidate Starts for Fizzles_14:

(30, 4895), (31, 4889), (37, 4859), (41, 4838), (46, 4802), (Start: 52 @4739 has 28 MA's), (60, 4682), (64, 4610),

Gene: Forza_191 Start: 109282, Stop: 109476, Start Num: 56

Candidate Starts for Forza_191:

(Start: 55 @109270 has 2 MA's), (Start: 56 @109282 has 2 MA's), (61, 109330), (63, 109375),

Gene: Fransoyer_13 Start: 4233, Stop: 4018, Start Num: 52

Candidate Starts for Fransoyer_13:

(Start: 52 @4233 has 28 MA's), (Start: 57 @4200 has 1 MA's), (64, 4104),

Gene: Fregley_13 Start: 3754, Stop: 3554, Start Num: 51

Candidate Starts for Fregley_13:

(26, 3928), (32, 3895), (40, 3856), (Start: 51 @3754 has 6 MA's), (Start: 58 @3703 has 1 MA's), (66, 3619), (68, 3598),

Gene: GMA2_95 Start: 87367, Stop: 87170, Start Num: 54

Candidate Starts for GMA2_95:
(54, 87367), (Start: 56 @87349 has 2 MA's),

Gene: Gazebo_12 Start: 4574, Stop: 4359, Start Num: 52
Candidate Starts for Gazebo_12:
(Start: 52 @4574 has 28 MA's), (60, 4517), (65, 4442),

Gene: Grassboy_15 Start: 5355, Stop: 5140, Start Num: 52
Candidate Starts for Grassboy_15:
(Start: 52 @5355 has 28 MA's), (60, 5298), (65, 5223),

Gene: Hyperion_12 Start: 4612, Stop: 4397, Start Num: 52
Candidate Starts for Hyperion_12:
(1, 5857), (2, 5821), (3, 5815), (4, 5704), (7, 5482), (8, 5404), (9, 5374), (10, 5293), (11, 5200), (12, 5122), (14, 4996), (25, 4804), (28, 4786), (31, 4762), (34, 4750), (39, 4723), (46, 4675), (Start: 52 @4612 has 28 MA's), (60, 4555), (65, 4480),

Gene: Jehoshaphat_16 Start: 5613, Stop: 5398, Start Num: 52
Candidate Starts for Jehoshaphat_16:
(Start: 52 @5613 has 28 MA's), (60, 5556), (65, 5481),

Gene: Judebell_16 Start: 5139, Stop: 4924, Start Num: 52
Candidate Starts for Judebell_16:
(Start: 52 @5139 has 28 MA's), (60, 5082), (65, 5007),

Gene: Kelcole_10 Start: 3363, Stop: 3163, Start Num: 51
Candidate Starts for Kelcole_10:
(15, 3684), (18, 3642), (23, 3561), (27, 3507), (29, 3492), (42, 3432), (Start: 51 @3363 has 6 MA's), (Start: 58 @3312 has 1 MA's), (66, 3228), (68, 3207),

Gene: Kyva_17 Start: 5333, Stop: 5175, Start Num: 60
Candidate Starts for Kyva_17:
(Start: 52 @5390 has 28 MA's), (60, 5333), (65, 5258),

Gene: Llemily_14 Start: 4332, Stop: 4174, Start Num: 60
Candidate Starts for Llemily_14:
(1, 5628), (2, 5592), (3, 5586), (4, 5481), (5, 5376), (6, 5370), (7, 5259), (8, 5181), (9, 5151), (10, 5070), (11, 4977), (12, 4899), (14, 4773), (17, 4704), (25, 4581), (28, 4563), (31, 4539), (34, 4527), (39, 4500), (46, 4452), (Start: 52 @4389 has 28 MA's), (60, 4332), (65, 4257),

Gene: Lonelysoil_13 Start: 4634, Stop: 4419, Start Num: 52
Candidate Starts for Lonelysoil_13:
(Start: 52 @4634 has 28 MA's), (60, 4577), (65, 4502),

Gene: Mao1_84 Start: 56412, Stop: 56618, Start Num: 54
Candidate Starts for Mao1_84:
(50, 56379), (54, 56412), (67, 56562),

Gene: Marcie_16 Start: 4028, Stop: 3816, Start Num: 52
Candidate Starts for Marcie_16:
(48, 4067), (49, 4061), (Start: 52 @4028 has 28 MA's), (64, 3899), (66, 3881),

Gene: Mareelih_188 Start: 108788, Stop: 108994, Start Num: 55

Candidate Starts for Mareelih_188:

(Start: 55 @108788 has 2 MA's), (Start: 56 @108800 has 2 MA's), (61, 108848), (63, 108893),

Gene: Mashley_11 Start: 4429, Stop: 4214, Start Num: 52

Candidate Starts for Mashley_11:

(Start: 52 @4429 has 28 MA's), (60, 4372), (65, 4297),

Gene: Namago_14 Start: 4446, Stop: 4231, Start Num: 52

Candidate Starts for Namago_14:

(Start: 52 @4446 has 28 MA's), (60, 4389), (65, 4314),

Gene: Nike_15 Start: 5337, Stop: 5122, Start Num: 52

Candidate Starts for Nike_15:

(9, 6102), (10, 6021), (11, 5928), (12, 5850), (14, 5724), (17, 5655), (25, 5529), (28, 5511), (31, 5487), (34, 5475), (39, 5448), (46, 5400), (Start: 52 @5337 has 28 MA's), (60, 5280), (65, 5205),

Gene: OneinaGillian_11 Start: 3006, Stop: 2806, Start Num: 51

Candidate Starts for OneinaGillian_11:

(18, 3318), (43, 3090), (44, 3087), (45, 3075), (Start: 51 @3006 has 6 MA's), (53, 3000), (66, 2871), (68, 2850),

Gene: Pepe25_11 Start: 3464, Stop: 3252, Start Num: 52

Candidate Starts for Pepe25_11:

(Start: 52 @3464 has 28 MA's), (66, 3317),

Gene: Phabia_14 Start: 4804, Stop: 4589, Start Num: 52

Candidate Starts for Phabia_14:

(Start: 52 @4804 has 28 MA's), (60, 4747), (65, 4672),

Gene: Phinky_18 Start: 5034, Stop: 4834, Start Num: 51

Candidate Starts for Phinky_18:

(13, 5412), (16, 5343), (18, 5325), (24, 5235), (33, 5151), (36, 5139), (38, 5130), (47, 5076), (Start: 51 @5034 has 6 MA's), (59, 4980), (62, 4950), (68, 4878),

Gene: Quammi_12 Start: 4378, Stop: 4163, Start Num: 52

Candidate Starts for Quammi_12:

(1, 5617), (2, 5581), (3, 5575), (4, 5470), (5, 5365), (6, 5359), (7, 5248), (8, 5170), (9, 5140), (10, 5059), (11, 4966), (12, 4888), (14, 4762), (17, 4693), (25, 4570), (28, 4552), (31, 4528), (34, 4516), (39, 4489), (46, 4441), (Start: 52 @4378 has 28 MA's), (60, 4321), (65, 4246),

Gene: RobinRose_12 Start: 3192, Stop: 2992, Start Num: 51

Candidate Starts for RobinRose_12:

(15, 3513), (18, 3471), (27, 3336), (42, 3261), (Start: 51 @3192 has 6 MA's), (Start: 58 @3141 has 1 MA's), (66, 3057), (68, 3036),

Gene: Romm_13 Start: 3192, Stop: 2992, Start Num: 51

Candidate Starts for Romm_13:

(15, 3513), (18, 3471), (27, 3336), (42, 3261), (Start: 51 @3192 has 6 MA's), (Start: 58 @3141 has 1 MA's), (66, 3057), (68, 3036),

Gene: Rowlf_11 Start: 4144, Stop: 3929, Start Num: 52

Candidate Starts for Rowlf_11:

(9, 4906), (10, 4825), (11, 4732), (12, 4654), (14, 4528), (17, 4459), (25, 4336), (28, 4318), (31, 4294), (34, 4282), (39, 4255), (46, 4207), (Start: 52 @4144 has 28 MA's), (60, 4087), (65, 4012),

Gene: RubyRalph_13 Start: 4167, Stop: 3952, Start Num: 52

Candidate Starts for RubyRalph_13:

(Start: 52 @4167 has 28 MA's), (Start: 57 @4134 has 1 MA's), (64, 4038),

Gene: Rudy_12 Start: 4378, Stop: 4163, Start Num: 52

Candidate Starts for Rudy_12:

(1, 5617), (2, 5581), (3, 5575), (4, 5470), (5, 5365), (6, 5359), (7, 5248), (8, 5170), (9, 5140), (10, 5059), (11, 4966), (12, 4888), (14, 4762), (17, 4693), (25, 4570), (28, 4552), (31, 4528), (34, 4516), (39, 4489), (46, 4441), (Start: 52 @4378 has 28 MA's), (60, 4321), (65, 4246),

Gene: SadLad_14 Start: 4551, Stop: 4369, Start Num: 57

Candidate Starts for SadLad_14:

(25, 4779), (27, 4764), (31, 4737), (Start: 52 @4584 has 28 MA's), (Start: 57 @4551 has 1 MA's), (59, 4533), (64, 4455),

Gene: SallyK_15 Start: 5539, Stop: 5324, Start Num: 52

Candidate Starts for SallyK_15:

(Start: 52 @5539 has 28 MA's), (60, 5482), (65, 5407),

Gene: Sillytadpoles_14 Start: 4319, Stop: 4161, Start Num: 60

Candidate Starts for Sillytadpoles_14:

(1, 5615), (2, 5579), (3, 5573), (4, 5468), (5, 5363), (6, 5357), (7, 5246), (8, 5168), (9, 5138), (10, 5057), (11, 4964), (12, 4886), (14, 4760), (17, 4691), (25, 4568), (28, 4550), (31, 4526), (34, 4514), (39, 4487), (46, 4439), (Start: 52 @4376 has 28 MA's), (60, 4319), (65, 4244),

Gene: Squash_16 Start: 5392, Stop: 5177, Start Num: 52

Candidate Starts for Squash_16:

(9, 6157), (10, 6076), (11, 5983), (12, 5905), (14, 5779), (17, 5710), (25, 5584), (28, 5566), (31, 5542), (34, 5530), (39, 5503), (46, 5455), (Start: 52 @5392 has 28 MA's), (60, 5335), (65, 5260),

Gene: StrawberryJamm_16 Start: 4678, Stop: 4463, Start Num: 52

Candidate Starts for StrawberryJamm_16:

(Start: 52 @4678 has 28 MA's), (60, 4621), (65, 4546),

Gene: Teehee_16 Start: 5613, Stop: 5398, Start Num: 52

Candidate Starts for Teehee_16:

(Start: 52 @5613 has 28 MA's), (60, 5556), (65, 5481),

Gene: Tempo_11 Start: 3387, Stop: 3187, Start Num: 51

Candidate Starts for Tempo_11:

(15, 3708), (18, 3666), (27, 3531), (42, 3456), (Start: 51 @3387 has 6 MA's), (Start: 58 @3336 has 1 MA's), (66, 3252), (68, 3231),

Gene: Tissue_13 Start: 4687, Stop: 4529, Start Num: 60

Candidate Starts for Tissue_13:

(Start: 52 @4744 has 28 MA's), (60, 4687), (65, 4612),

Gene: Viceroy_13 Start: 4378, Stop: 4163, Start Num: 52

Candidate Starts for Viceroy_13:

(1, 5617), (2, 5581), (3, 5575), (4, 5470), (5, 5365), (6, 5359), (7, 5248), (8, 5170), (9, 5140), (10, 5059), (11, 4966), (12, 4888), (14, 4762), (17, 4693), (25, 4570), (28, 4552), (31, 4528), (34, 4516), (39, 4489), (46, 4441), (Start: 52 @4378 has 28 MA's), (60, 4321), (65, 4246),

Gene: Wayne3_15 Start: 5316, Stop: 5101, Start Num: 52

Candidate Starts for Wayne3_15:

(Start: 52 @5316 has 28 MA's), (60, 5259), (65, 5184),

Gene: Wheelie_13 Start: 4667, Stop: 4452, Start Num: 52

Candidate Starts for Wheelie_13:

(Start: 52 @4667 has 28 MA's), (60, 4610), (65, 4535),

Gene: Wilca_12 Start: 3464, Stop: 3252, Start Num: 52

Candidate Starts for Wilca_12:

(Start: 52 @3464 has 28 MA's), (66, 3317),

Gene: Zagie_14 Start: 4881, Stop: 4666, Start Num: 52

Candidate Starts for Zagie_14:

(9, 5643), (10, 5562), (11, 5469), (12, 5391), (14, 5265), (17, 5196), (25, 5073), (28, 5055), (31, 5031), (34, 5019), (39, 4992), (46, 4944), (Start: 52 @4881 has 28 MA's), (60, 4824), (65, 4749),

Gene: Zhafia_17 Start: 5059, Stop: 4901, Start Num: 60

Candidate Starts for Zhafia_17:

(Start: 52 @5116 has 28 MA's), (60, 5059), (65, 4984),