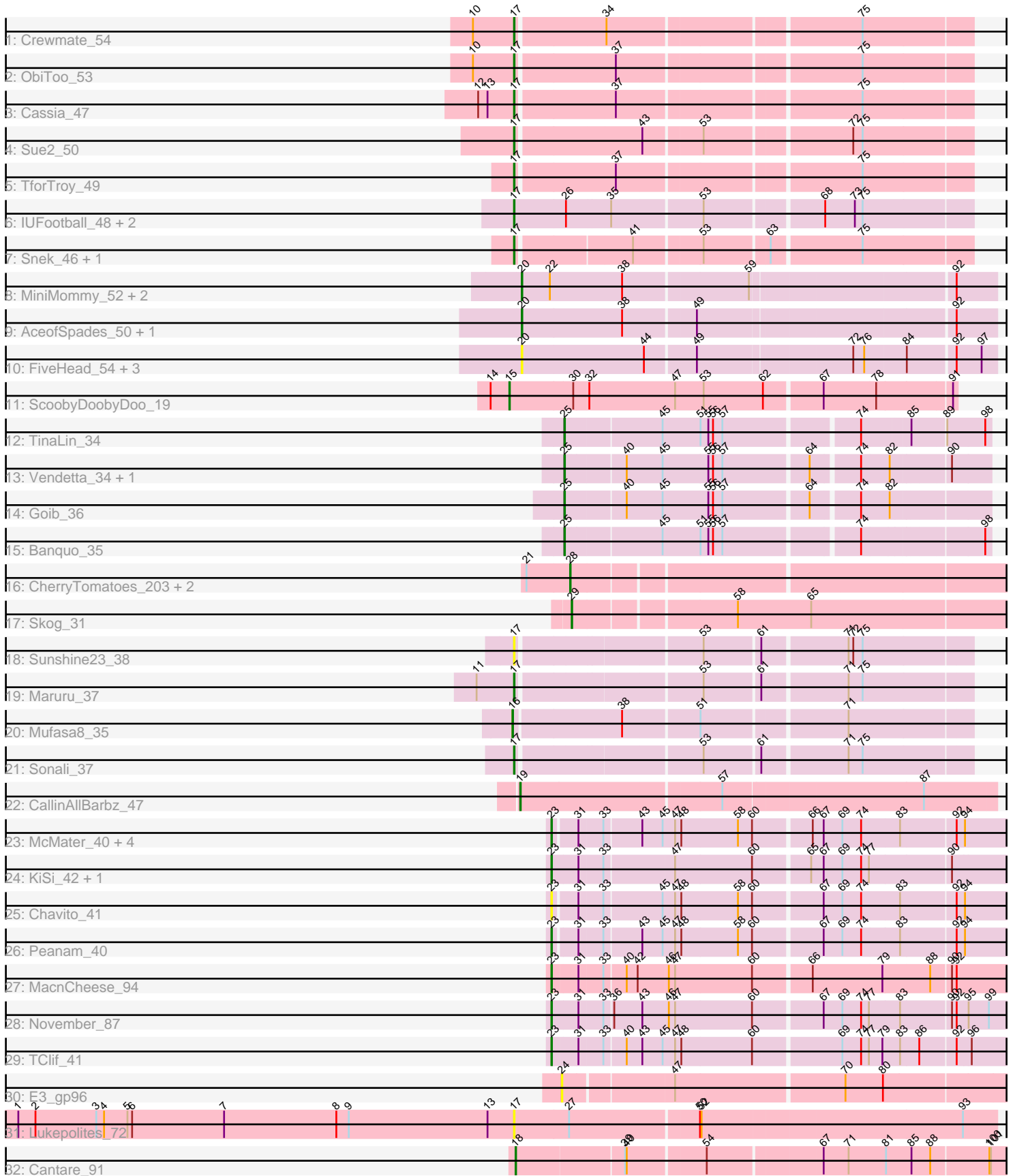


Pham 308767



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 308767 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308767 has 49 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Crewmate_54
- Track 2 : ObiToo_53
- Track 3 : Cassia_47
- Track 4 : Sue2_50
- Track 5 : TforTroy_49
- Track 6 : IUFootball_48, Liebe_48, Maureen_48
- Track 7 : Snek_46, Tweety19_47
- Track 8 : MiniMommy_52, JasmineDragon_52, ShakeltOph_52
- Track 9 : AceofSpades_50, VroomVroom_49
- Track 10 : FiveHead_54, JohnThicc_53, LadyAstra_53, Origami_52
- Track 11 : ScoobyDoobyDoo_19
- Track 12 : TinaLin_34
- Track 13 : Vendetta_34, Splinter_34
- Track 14 : Goib_36
- Track 15 : Banquo_35
- Track 16 : CherryTomatoes_203, SCentae_200, Pupper_201
- Track 17 : Skog_31
- Track 18 : Sunshine23_38
- Track 19 : Maruru_37
- Track 20 : Mufasa8_35
- Track 21 : Sonali_37
- Track 22 : CallinAllBarbz_47
- Track 23 : McMater_40, Shaobing_40, Dartin_40, Niklas_40, Richo_40
- Track 24 : KiSi_42, LeMond_42
- Track 25 : Chavito_41
- Track 26 : Peanam_40
- Track 27 : MacnCheese_94
- Track 28 : November_87
- Track 29 : TClif_41
- Track 30 : E3_gp96
- Track 31 : Lukepolites_72
- Track 32 : Cantare_91

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

The start number called the most often in the published annotations is 17, it was called in 11 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Cassia_47, Crewmate_54, IUFootball_48, Liebe_48, Lukepolites_72, Maruru_37, Maureen_48, ObiToo_53, Snek_46, Sonali_37, Sue2_50, Sunshine23_38, TforTroy_49, Tweety19_47,

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

-

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

- AceofSpades_50, Banquo_35, CallinAllBarbz_47, Cantare_91, Chavito_41, CherryTomatoes_203, Dartin_40, E3_gp96, FiveHead_54, Goib_36, JasmineDragon_52, JohnThicc_53, KiSi_42, LadyAstra_53, LeMond_42, MacnCheese_94, McMater_40, MiniMommy_52, Mufasa8_35, Niklas_40, November_87, Origami_52, Peanam_40, Pupper_201, Richo_40, SCentae_200, ScoobyDoobyDoo_19, ShakeltOph_52, Shaobing_40, Skog_31, Splinter_34, TClif_41, TinaLin_34, Vendetta_34, VroomVroom_49,

Summary by start number:

Start 15:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_19 (C2),

Start 16:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mufasa8_35 (FG),

Start 17:

- Found in 14 of 49 (28.6%) of genes in pham
- Manual Annotations of this start: 11 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cassia_47 (AZ1), Crewmate_54 (AZ1), IUFootball_48 (AZ2), Liebe_48 (AZ2), Lukepolites_72 (singleton), Maruru_37 (FG), Maureen_48 (AZ2), ObiToo_53 (AZ1), Snek_46 (AZ3), Sonali_37 (FG), Sue2_50 (AZ1), Sunshine23_38 (FG), TforTroy_49 (AZ1), Tweety19_47 (AZ3),

Start 18:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_91 (singleton),

Start 19:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 36

- Called 100.0% of time when present
- Phage (with cluster) where this start called: CallinAllBarbz_47 (FP),

Start 20:

- Found in 9 of 49 (18.4%) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AceofSpades_50 (AZ4), FiveHead_54 (AZ4), JasmineDragon_52 (AZ4), JohnThicc_53 (AZ4), LadyAstra_53 (AZ4), MiniMommy_52 (AZ4), Origami_52 (AZ4), ShakeltOph_52 (AZ4), VroomVroom_49 (AZ4),

Start 23:

- Found in 12 of 49 (24.5%) of genes in pham
- Manual Annotations of this start: 8 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chavito_41 (K1), Dartin_40 (K1), KiSi_42 (K1), LeMond_42 (K1), MacnCheese_94 (K3), McMater_40 (K1), Niklas_40 (K1), November_87 (K6), Peanam_40 (K1), Richo_40 (K1), Shaobing_40 (K1), TClif_41 (K6),

Start 24:

- Found in 1 of 49 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp96 (singleton),

Start 25:

- Found in 5 of 49 (10.2%) of genes in pham
- Manual Annotations of this start: 5 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo_35 (CU1), Goib_36 (CU1), Splinter_34 (CU1), TinaLin_34 (CU1), Vendetta_34 (CU1),

Start 28:

- Found in 3 of 49 (6.1%) of genes in pham
- Manual Annotations of this start: 3 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_203 (DO), Pupper_201 (DO), SCentae_200 (DO),

Start 29:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Skog_31 (DO),

Summary by clusters:

There are 13 clusters represented in this pham: FP, DO, singleton, CU1, FG, K3, K1, K6, AZ1, C2, AZ2, AZ3, AZ4,

Info for manual annotations of cluster AZ1:

- Start number 17 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 17 was manually annotated 2 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 17 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 20 was manually annotated 4 times for cluster AZ4.

Info for manual annotations of cluster C2:

- Start number 15 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CU1:

- Start number 25 was manually annotated 5 times for cluster CU1.

Info for manual annotations of cluster DO:

- Start number 28 was manually annotated 3 times for cluster DO.

- Start number 29 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster FG:

- Start number 16 was manually annotated 1 time for cluster FG.

- Start number 17 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FP:

- Start number 19 was manually annotated 1 time for cluster FP.

Info for manual annotations of cluster K1:

- Start number 23 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 23 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K6:

- Start number 23 was manually annotated 2 times for cluster K6.

Gene Information:

Gene: AceofSpades_50 Start: 35315, Stop: 36178, Start Num: 20

Candidate Starts for AceofSpades_50:

(Start: 20 @35315 has 4 MA's), (38, 35507), (49, 35636), (92, 36101),

Gene: Banquo_35 Start: 24903, Stop: 25655, Start Num: 25

Candidate Starts for Banquo_35:

(Start: 25 @24903 has 5 MA's), (45, 25080), (51, 25149), (55, 25164), (56, 25173), (57, 25191), (74, 25431), (98, 25644),

Gene: CallinAllBarbz_47 Start: 33759, Stop: 34640, Start Num: 19

Candidate Starts for CallinAllBarbz_47:

(Start: 19 @33759 has 1 MA's), (57, 34131), (87, 34503),

Gene: Cantare_91 Start: 69371, Stop: 70267, Start Num: 18

Candidate Starts for Cantare_91:

(Start: 18 @69371 has 1 MA's), (39, 69572), (40, 69575), (54, 69716), (67, 69923), (71, 69971), (81, 70043), (85, 70091), (88, 70124), (100, 70232), (101, 70235),

Gene: Cassia_47 Start: 34201, Stop: 35019, Start Num: 17

Candidate Starts for Cassia_47:

(12, 34132), (13, 34150), (Start: 17 @34201 has 11 MA's), (37, 34381), (75, 34816),

Gene: Chavito_41 Start: 31100, Stop: 31924, Start Num: 23

Candidate Starts for Chavito_41:

(Start: 23 @31100 has 8 MA's), (31, 31139), (33, 31184), (45, 31292), (47, 31313), (48, 31325), (58, 31433), (60, 31460), (67, 31586), (69, 31622), (74, 31658), (83, 31730), (92, 31832), (94, 31847),

Gene: CherryTomatoes_203 Start: 138518, Stop: 139312, Start Num: 28

Candidate Starts for CherryTomatoes_203:

(21, 138437), (Start: 28 @138518 has 3 MA's),

Gene: Crewmate_54 Start: 35949, Stop: 36764, Start Num: 17

Candidate Starts for Crewmate_54:

(10, 35871), (Start: 17 @35949 has 11 MA's), (34, 36108), (75, 36561),

Gene: Dartin_40 Start: 30486, Stop: 31310, Start Num: 23

Candidate Starts for Dartin_40:

(Start: 23 @30486 has 8 MA's), (31, 30525), (33, 30570), (43, 30639), (45, 30678), (47, 30699), (48, 30711), (58, 30819), (60, 30846), (66, 30951), (67, 30972), (69, 31008), (74, 31044), (83, 31116), (92, 31218), (94, 31233),

Gene: E3_gp96 Start: 54822, Stop: 55628, Start Num: 24

Candidate Starts for E3_gp96:

(24, 54822), (47, 55017), (70, 55329), (80, 55401),

Gene: FiveHead_54 Start: 35285, Stop: 36151, Start Num: 20

Candidate Starts for FiveHead_54:

(Start: 20 @35285 has 4 MA's), (44, 35516), (49, 35609), (72, 35891), (76, 35912), (84, 35987), (92, 36074), (97, 36122),

Gene: Goib_36 Start: 25321, Stop: 26073, Start Num: 25

Candidate Starts for Goib_36:

(Start: 25 @25321 has 5 MA's), (40, 25429), (45, 25498), (55, 25582), (56, 25591), (57, 25609), (64, 25765), (74, 25849), (82, 25900),

Gene: IUFootball_48 Start: 35450, Stop: 36277, Start Num: 17

Candidate Starts for IUFootball_48:

(Start: 17 @35450 has 11 MA's), (26, 35549), (35, 35627), (53, 35792), (68, 36002), (73, 36059), (75, 36074),

Gene: JasmineDragon_52 Start: 35594, Stop: 36457, Start Num: 20

Candidate Starts for JasmineDragon_52:

(Start: 20 @35594 has 4 MA's), (22, 35648), (38, 35786), (59, 36014), (92, 36380),

Gene: JohnThicc_53 Start: 35285, Stop: 36151, Start Num: 20

Candidate Starts for JohnThicc_53:

(Start: 20 @35285 has 4 MA's), (44, 35516), (49, 35609), (72, 35891), (76, 35912), (84, 35987), (92, 36074), (97, 36122),

Gene: KiSi_42 Start: 31153, Stop: 31986, Start Num: 23

Candidate Starts for KiSi_42:

(Start: 23 @31153 has 8 MA's), (31, 31201), (33, 31246), (47, 31375), (60, 31522), (65, 31624), (67, 31648), (69, 31684), (74, 31720), (77, 31735), (90, 31885),

Gene: LadyAstra_53 Start: 35385, Stop: 36251, Start Num: 20

Candidate Starts for LadyAstra_53:

(Start: 20 @35385 has 4 MA's), (44, 35616), (49, 35709), (72, 35991), (76, 36012), (84, 36087), (92, 36174), (97, 36222),

Gene: LeMond_42 Start: 31224, Stop: 32057, Start Num: 23

Candidate Starts for LeMond_42:

(Start: 23 @31224 has 8 MA's), (31, 31272), (33, 31317), (47, 31446), (60, 31593), (65, 31695), (67, 31719), (69, 31755), (74, 31791), (77, 31806), (90, 31956),

Gene: Liebe_48 Start: 35450, Stop: 36277, Start Num: 17

Candidate Starts for Liebe_48:

(Start: 17 @35450 has 11 MA's), (26, 35549), (35, 35627), (53, 35792), (68, 36002), (73, 36059), (75, 36074),

Gene: Lukepolites_72 Start: 46172, Stop: 45276, Start Num: 17

Candidate Starts for Lukepolites_72:

(1, 47126), (2, 47093), (3, 46976), (4, 46961), (5, 46916), (6, 46907), (7, 46730), (8, 46514), (9, 46490), (13, 46223), (Start: 17 @46172 has 11 MA's), (27, 46067), (50, 45830), (52, 45827), (93, 45341),

Gene: MacnCheese_94 Start: 57896, Stop: 58729, Start Num: 23

Candidate Starts for MacnCheese_94:

(Start: 23 @57896 has 8 MA's), (31, 57941), (33, 57986), (40, 58025), (42, 58046), (46, 58103), (47, 58115), (60, 58262), (66, 58367), (79, 58499), (88, 58589), (90, 58625), (92, 58634),

Gene: Maruru_37 Start: 32121, Stop: 31306, Start Num: 17

Candidate Starts for Maruru_37:

(11, 32190), (Start: 17 @32121 has 11 MA's), (53, 31791), (61, 31689), (71, 31536), (75, 31509),

Gene: Maureen_48 Start: 35450, Stop: 36277, Start Num: 17

Candidate Starts for Maureen_48:

(Start: 17 @35450 has 11 MA's), (26, 35549), (35, 35627), (53, 35792), (68, 36002), (73, 36059), (75, 36074),

Gene: McMater_40 Start: 30486, Stop: 31310, Start Num: 23

Candidate Starts for McMater_40:

(Start: 23 @30486 has 8 MA's), (31, 30525), (33, 30570), (43, 30639), (45, 30678), (47, 30699), (48, 30711), (58, 30819), (60, 30846), (66, 30951), (67, 30972), (69, 31008), (74, 31044), (83, 31116), (92, 31218), (94, 31233),

Gene: MiniMommy_52 Start: 35595, Stop: 36458, Start Num: 20

Candidate Starts for MiniMommy_52:

(Start: 20 @35595 has 4 MA's), (22, 35649), (38, 35787), (59, 36015), (92, 36381),

Gene: Mufasa8_35 Start: 29933, Stop: 29103, Start Num: 16
Candidate Starts for Mufasa8_35:
(Start: 16 @29933 has 1 MA's), (38, 29732), (51, 29594), (71, 29333),

Gene: Niklas_40 Start: 30489, Stop: 31313, Start Num: 23
Candidate Starts for Niklas_40:
(Start: 23 @30489 has 8 MA's), (31, 30528), (33, 30573), (43, 30642), (45, 30681), (47, 30702), (48, 30714), (58, 30822), (60, 30849), (66, 30954), (67, 30975), (69, 31011), (74, 31047), (83, 31119), (92, 31221), (94, 31236),

Gene: November_87 Start: 57492, Stop: 58328, Start Num: 23
Candidate Starts for November_87:
(Start: 23 @57492 has 8 MA's), (31, 57540), (33, 57585), (36, 57600), (43, 57654), (46, 57702), (47, 57714), (60, 57861), (67, 57987), (69, 58023), (74, 58059), (77, 58074), (83, 58131), (90, 58224), (92, 58233), (95, 58254), (99, 58293),

Gene: ObiToo_53 Start: 35343, Stop: 36158, Start Num: 17
Candidate Starts for ObiToo_53:
(10, 35265), (Start: 17 @35343 has 11 MA's), (37, 35520), (75, 35955),

Gene: Origami_52 Start: 35177, Stop: 36043, Start Num: 20
Candidate Starts for Origami_52:
(Start: 20 @35177 has 4 MA's), (44, 35408), (49, 35501), (72, 35783), (76, 35804), (84, 35879), (92, 35966), (97, 36014),

Gene: Peanam_40 Start: 30486, Stop: 31310, Start Num: 23
Candidate Starts for Peanam_40:
(Start: 23 @30486 has 8 MA's), (31, 30525), (33, 30570), (43, 30639), (45, 30678), (47, 30699), (48, 30711), (58, 30819), (60, 30846), (67, 30972), (69, 31008), (74, 31044), (83, 31116), (92, 31218), (94, 31233),

Gene: Pupper_201 Start: 138380, Stop: 139174, Start Num: 28
Candidate Starts for Pupper_201:
(21, 138299), (Start: 28 @138380 has 3 MA's),

Gene: Richo_40 Start: 30486, Stop: 31310, Start Num: 23
Candidate Starts for Richo_40:
(Start: 23 @30486 has 8 MA's), (31, 30525), (33, 30570), (43, 30639), (45, 30678), (47, 30699), (48, 30711), (58, 30819), (60, 30846), (66, 30951), (67, 30972), (69, 31008), (74, 31044), (83, 31116), (92, 31218), (94, 31233),

Gene: SCentae_200 Start: 138572, Stop: 139366, Start Num: 28
Candidate Starts for SCentae_200:
(21, 138491), (Start: 28 @138572 has 3 MA's),

Gene: ScoobyDoobyDoo_19 Start: 5999, Stop: 6829, Start Num: 15
Candidate Starts for ScoobyDoobyDoo_19:
(14, 5963), (Start: 15 @5999 has 1 MA's), (30, 6119), (32, 6146), (47, 6311), (53, 6365), (62, 6479), (67, 6584), (78, 6683), (91, 6821),

Gene: ShakeltOph_52 Start: 35594, Stop: 36457, Start Num: 20
Candidate Starts for ShakeltOph_52:
(Start: 20 @35594 has 4 MA's), (22, 35648), (38, 35786), (59, 36014), (92, 36380),

Gene: Shaobing_40 Start: 30486, Stop: 31310, Start Num: 23

Candidate Starts for Shaobing_40:

(Start: 23 @30486 has 8 MA's), (31, 30525), (33, 30570), (43, 30639), (45, 30678), (47, 30699), (48, 30711), (58, 30819), (60, 30846), (66, 30951), (67, 30972), (69, 31008), (74, 31044), (83, 31116), (92, 31218), (94, 31233),

Gene: Skog_31 Start: 14091, Stop: 14894, Start Num: 29

Candidate Starts for Skog_31:

(Start: 29 @14091 has 1 MA's), (58, 14385), (65, 14526),

Gene: Snek_46 Start: 32794, Stop: 33606, Start Num: 17

Candidate Starts for Snek_46:

(Start: 17 @32794 has 11 MA's), (41, 32998), (53, 33118), (63, 33235), (75, 33400),

Gene: Sonali_37 Start: 32584, Stop: 31769, Start Num: 17

Candidate Starts for Sonali_37:

(Start: 17 @32584 has 11 MA's), (53, 32254), (61, 32152), (71, 31999), (75, 31972),

Gene: Splinter_34 Start: 25311, Stop: 26063, Start Num: 25

Candidate Starts for Splinter_34:

(Start: 25 @25311 has 5 MA's), (40, 25419), (45, 25488), (55, 25572), (56, 25581), (57, 25599), (64, 25755), (74, 25839), (82, 25890), (90, 25989),

Gene: Sue2_50 Start: 35531, Stop: 36343, Start Num: 17

Candidate Starts for Sue2_50:

(Start: 17 @35531 has 11 MA's), (43, 35753), (53, 35858), (72, 36122), (75, 36140),

Gene: Sunshine23_38 Start: 32459, Stop: 31644, Start Num: 17

Candidate Starts for Sunshine23_38:

(Start: 17 @32459 has 11 MA's), (53, 32129), (61, 32027), (71, 31874), (72, 31865), (75, 31847),

Gene: TClif_41 Start: 30689, Stop: 31522, Start Num: 23

Candidate Starts for TClif_41:

(Start: 23 @30689 has 8 MA's), (31, 30734), (33, 30779), (40, 30818), (43, 30848), (45, 30887), (47, 30908), (48, 30920), (60, 31055), (69, 31217), (74, 31253), (77, 31268), (79, 31292), (83, 31325), (86, 31361), (92, 31427), (96, 31454),

Gene: TforTroy_49 Start: 34740, Stop: 35558, Start Num: 17

Candidate Starts for TforTroy_49:

(Start: 17 @34740 has 11 MA's), (37, 34920), (75, 35355),

Gene: TinaLin_34 Start: 24579, Stop: 25328, Start Num: 25

Candidate Starts for TinaLin_34:

(Start: 25 @24579 has 5 MA's), (45, 24756), (51, 24825), (55, 24840), (56, 24849), (57, 24867), (74, 25107), (85, 25188), (89, 25245), (98, 25317),

Gene: Tweety19_47 Start: 32794, Stop: 33606, Start Num: 17

Candidate Starts for Tweety19_47:

(Start: 17 @32794 has 11 MA's), (41, 32998), (53, 33118), (63, 33235), (75, 33400),

Gene: Vendetta_34 Start: 25311, Stop: 26063, Start Num: 25

Candidate Starts for Vendetta_34:

(Start: 25 @25311 has 5 MA's), (40, 25419), (45, 25488), (55, 25572), (56, 25581), (57, 25599), (64, 25755), (74, 25839), (82, 25890), (90, 25989),

Gene: VroomVroom_49 Start: 35179, Stop: 36042, Start Num: 20

Candidate Starts for VroomVroom_49:

(Start: 20 @35179 has 4 MA's), (38, 35371), (49, 35500), (92, 35965),