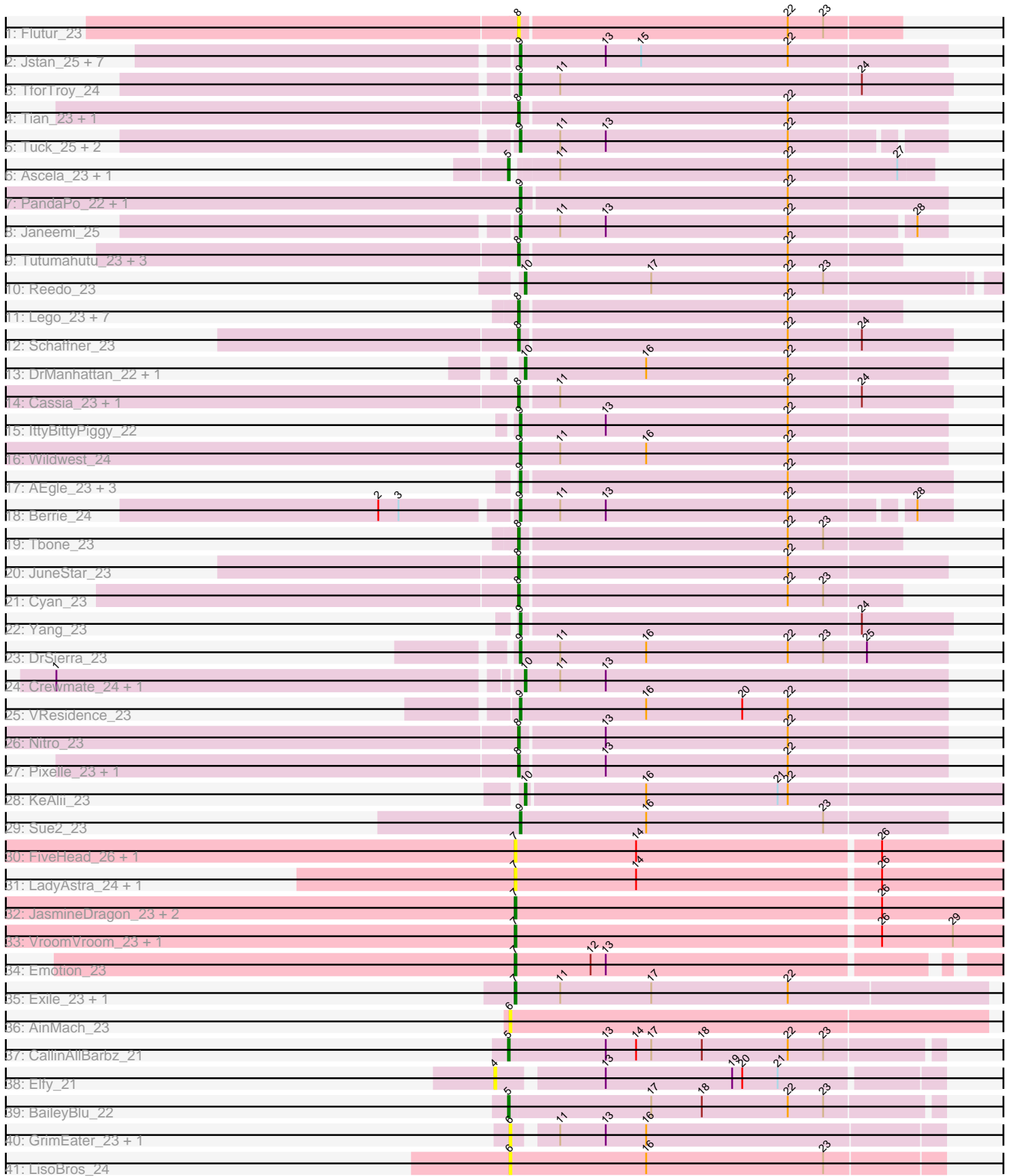


Pham 294668



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 294668 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294668 has 77 members, 23 are drafts.

Phages represented in each track:

- Track 1 : Flutur_23
- Track 2 : Jstan_25, Elezi_24, Asa16_24, Eraser_24, Skelbel_25, London_24, Subaru_25, Niobe_24
- Track 3 : TforTroy_24
- Track 4 : Tian_23, Amyev_23
- Track 5 : Tuck_25, Phives_25, Community_24
- Track 6 : Ascela_23, Iter_23
- Track 7 : PandaPo_22, MissSwiss_22
- Track 8 : Janeemi_25
- Track 9 : Tutumahutu_23, AGrandiflora_24, YesChef_23, Powerpuff_23
- Track 10 : Reedo_23
- Track 11 : Lego_23, Joemato_23, Lizalica_23, Kaylissa_23, Warda_23, Mudpuppy_23, JohnDoe_23, Simpson_25
- Track 12 : Schaffner_23
- Track 13 : DrManhattan_22, Adolin_22
- Track 14 : Cassia_23, Pumpkins_23
- Track 15 : IttyBittyPiggy_22
- Track 16 : Wildwest_24
- Track 17 : AEgle_23, Adumb2043_23, Turab_23, Amploria_23
- Track 18 : Berrie_24
- Track 19 : Tbone_23
- Track 20 : JuneStar_23
- Track 21 : Cyan_23
- Track 22 : Yang_23
- Track 23 : DrSierra_23
- Track 24 : Crewmate_24, ObiToo_23
- Track 25 : VResidence_23
- Track 26 : Nitro_23
- Track 27 : Pixelle_23, Tallboi_23
- Track 28 : KeAlii_23
- Track 29 : Sue2_23
- Track 30 : FiveHead_26, JohnThicc_25
- Track 31 : LadyAstra_24, Origami_24
- Track 32 : JasmineDragon_23, ShakeltOph_23, MiniMommy_23
- Track 33 : VroomVroom_23, AceofSpades_23
- Track 34 : Emotion_23
- Track 35 : Exile_23, Soondubu_23

- Track 36 : AinMach_23
- Track 37 : CallinAllBarbz_21
- Track 38 : Elfy_21
- Track 39 : BaileyBlu_22
- Track 40 : GrimEater_23, Jankie_24
- Track 41 : LisoBros_24

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

The start number called the most often in the published annotations is 8, it was called in 20 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AGrandiflora_24, Amyev_23, Cassia_23, Cyan_23, Flutur_23, Joemato_23, JohnDoe_23, JuneStar_23, Kaylissa_23, Lego_23, Lizalica_23, Mudpuppy_23, Nitro_23, Pixelle_23, Powerpuff_23, Pumpkins_23, Schaffner_23, Simpson_25, Tallboi_23, Tbone_23, Tian_23, Tutumahutu_23, Warda_23, YesChef_23,

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

-

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

- AEgle_23, AceofSpades_23, Adolin_22, Adumb2043_23, AinMach_23, Amploria_23, Asa16_24, Ascela_23, BaileyBlu_22, Berrie_24, CallinAllBarbz_21, Community_24, Crewmate_24, DrManhattan_22, DrSierra_23, Elezi_24, Elfy_21, Emotion_23, Eraser_24, Exile_23, FiveHead_26, GrimEater_23, Iter_23, IttyBittyPiggy_22, Janeemi_25, Jankie_24, JasmineDragon_23, JohnThicc_25, Jstan_25, KeAlii_23, LadyAstra_24, LisoBros_24, London_24, MiniMommy_23, MissSwiss_22, Niobe_24, ObiToo_23, Origami_24, PandaPo_22, Phives_25, Reedo_23, ShakeltOph_23, Skelbel_25, Soondubu_23, Subaru_25, Sue2_23, TforTroy_24, Tuck_25, Turab_23, VResidence_23, VroomVroom_23, Wildwest_24, Yang_23,

Summary by start number:

Start 4:

- Found in 1 of 77 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elfy_21 (FP),

Start 5:

- Found in 4 of 77 (5.2%) of genes in pham
- Manual Annotations of this start: 4 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela_23 (AZ1), BaileyBlu_22 (FP), CallinAllBarbz_21 (FP), Iter_23 (AZ1),

Start 6:

- Found in 4 of 77 (5.2%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AinMach_23 (AZ7), GrimEater_23 (FP), Jankie_24 (FP), LisoBros_24 (UNK),

Start 7:

- Found in 12 of 77 (15.6%) of genes in pham
- Manual Annotations of this start: 6 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AceofSpades_23 (AZ4), Emotion_23 (AZ4), Exile_23 (AZ6), FiveHead_26 (AZ4), JasmineDragon_23 (AZ4), JohnThicc_25 (AZ4), LadyAstra_24 (AZ4), MiniMommy_23 (AZ4), Origami_24 (AZ4), ShakeltOph_23 (AZ4), Soondubu_23 (AZ6), VroomVroom_23 (AZ4),

Start 8:

- Found in 24 of 77 (31.2%) of genes in pham
- Manual Annotations of this start: 20 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AGrandiflora_24 (AZ1), Amyev_23 (AZ1), Cassia_23 (AZ1), Cyan_23 (AZ1), Flutur_23 (AZ), Joemato_23 (AZ1), JohnDoe_23 (AZ1), JuneStar_23 (AZ1), Kaylissa_23 (AZ1), Lego_23 (AZ1), Lizalica_23 (AZ1), Mudpuppy_23 (AZ1), Nitro_23 (AZ1), Pixelle_23 (AZ1), Powerpuff_23 (AZ1), Pumpkins_23 (AZ1), Schaffner_23 (AZ1), Simpson_25 (AZ1), Tallboi_23 (AZ1), Tbone_23 (AZ1), Tian_23 (AZ1), Tutumahutu_23 (AZ1), Warda_23 (AZ1), YesChef_23 (AZ1),

Start 9:

- Found in 26 of 77 (33.8%) of genes in pham
- Manual Annotations of this start: 18 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_23 (AZ1), Adumb2043_23 (AZ1), Amploria_23 (AZ1), Asa16_24 (AZ1), Berrie_24 (AZ1), Community_24 (AZ1), DrSierra_23 (AZ1), Elezi_24 (AZ1), Eraser_24 (AZ1), IttyBittyPiggy_22 (AZ1), Janeemi_25 (AZ1), Jstan_25 (AZ1), London_24 (AZ1), MissSwiss_22 (AZ1), Niobe_24 (AZ1), PandaPo_22 (AZ1), Phives_25 (AZ1), Skelbel_25 (AZ1), Subaru_25 (AZ1), Sue2_23 (AZ1), TforTroy_24 (AZ1), Tuck_25 (AZ1), Turab_23 (AZ1), VResidence_23 (AZ1), Wildwest_24 (AZ1), Yang_23 (AZ1),

Start 10:

- Found in 6 of 77 (7.8%) of genes in pham
- Manual Annotations of this start: 6 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin_22 (AZ1), Crewmate_24 (AZ1), DrManhattan_22 (AZ1), KeAlii_23 (AZ1), ObiToo_23 (AZ1), Reedo_23 (AZ1),

Summary by clusters:

There are 7 clusters represented in this pham: FP, UNK, AZ1, AZ, AZ4, AZ6, AZ7,

Info for manual annotations of cluster AZ1:

- Start number 5 was manually annotated 2 times for cluster AZ1.
- Start number 8 was manually annotated 20 times for cluster AZ1.

- Start number 9 was manually annotated 18 times for cluster AZ1.
- Start number 10 was manually annotated 6 times for cluster AZ1.

Info for manual annotations of cluster AZ4:

- Start number 7 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ6:

- Start number 7 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster FP:

- Start number 5 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: AEgle_23 Start: 19548, Stop: 19799, Start Num: 9

Candidate Starts for AEgle_23:

(Start: 9 @19548 has 18 MA's), (22, 19704),

Gene: AGrandiflora_24 Start: 19645, Stop: 19866, Start Num: 8

Candidate Starts for AGrandiflora_24:

(Start: 8 @19645 has 20 MA's), (22, 19801),

Gene: AceofSpades_23 Start: 18772, Stop: 19056, Start Num: 7

Candidate Starts for AceofSpades_23:

(Start: 7 @18772 has 6 MA's), (26, 18985), (29, 19027),

Gene: Adolin_22 Start: 18001, Stop: 18249, Start Num: 10

Candidate Starts for Adolin_22:

(Start: 10 @18001 has 6 MA's), (16, 18073), (22, 18157),

Gene: Adumb2043_23 Start: 19547, Stop: 19798, Start Num: 9

Candidate Starts for Adumb2043_23:

(Start: 9 @19547 has 18 MA's), (22, 19703),

Gene: AinMach_23 Start: 20024, Stop: 20305, Start Num: 6

Candidate Starts for AinMach_23:

(6, 20024),

Gene: Amploria_23 Start: 19547, Stop: 19798, Start Num: 9

Candidate Starts for Amploria_23:

(Start: 9 @19547 has 18 MA's), (22, 19703),

Gene: Amyev_23 Start: 19937, Stop: 20185, Start Num: 8

Candidate Starts for Amyev_23:

(Start: 8 @19937 has 20 MA's), (22, 20093),

Gene: Asa16_24 Start: 20166, Stop: 20417, Start Num: 9

Candidate Starts for Asa16_24:

(Start: 9 @20166 has 18 MA's), (13, 20217), (15, 20238), (22, 20325),

Gene: Ascela_23 Start: 19556, Stop: 19798, Start Num: 5
Candidate Starts for Ascela_23:
(Start: 5 @19556 has 4 MA's), (11, 19580), (22, 19715), (27, 19778),

Gene: BaileyBlu_22 Start: 18791, Stop: 19042, Start Num: 5
Candidate Starts for BaileyBlu_22:
(Start: 5 @18791 has 4 MA's), (17, 18875), (18, 18905), (22, 18956), (23, 18977),

Gene: Berrie_24 Start: 20720, Stop: 20965, Start Num: 9
Candidate Starts for Berrie_24:
(2, 20645), (3, 20657), (Start: 9 @20720 has 18 MA's), (11, 20744), (13, 20771), (22, 20879), (28, 20945),

Gene: CallinAllBarbz_21 Start: 18801, Stop: 19052, Start Num: 5
Candidate Starts for CallinAllBarbz_21:
(Start: 5 @18801 has 4 MA's), (13, 18858), (14, 18876), (17, 18885), (18, 18915), (22, 18966), (23, 18987),

Gene: Cassia_23 Start: 19988, Stop: 20239, Start Num: 8
Candidate Starts for Cassia_23:
(Start: 8 @19988 has 20 MA's), (11, 20009), (22, 20144), (24, 20186),

Gene: Community_24 Start: 21806, Stop: 22048, Start Num: 9
Candidate Starts for Community_24:
(Start: 9 @21806 has 18 MA's), (11, 21830), (13, 21857), (22, 21965),

Gene: Crewmate_24 Start: 18617, Stop: 18865, Start Num: 10
Candidate Starts for Crewmate_24:
(1, 18350), (Start: 10 @18617 has 6 MA's), (11, 18638), (13, 18665),

Gene: Cyan_23 Start: 19693, Stop: 19914, Start Num: 8
Candidate Starts for Cyan_23:
(Start: 8 @19693 has 20 MA's), (22, 19849), (23, 19870),

Gene: DrManhattan_22 Start: 17991, Stop: 18239, Start Num: 10
Candidate Starts for DrManhattan_22:
(Start: 10 @17991 has 6 MA's), (16, 18063), (22, 18147),

Gene: DrSierra_23 Start: 18674, Stop: 18925, Start Num: 9
Candidate Starts for DrSierra_23:
(Start: 9 @18674 has 18 MA's), (11, 18698), (16, 18749), (22, 18833), (23, 18854), (25, 18878),

Gene: Elezi_24 Start: 20167, Stop: 20418, Start Num: 9
Candidate Starts for Elezi_24:
(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: Elfy_21 Start: 18779, Stop: 19030, Start Num: 4
Candidate Starts for Elfy_21:
(4, 18779), (13, 18836), (19, 18911), (20, 18917), (21, 18938),

Gene: Emotion_23 Start: 19367, Stop: 19633, Start Num: 7
Candidate Starts for Emotion_23:

(Start: 7 @19367 has 6 MA's), (12, 19412), (13, 19421),

Gene: Eraser_24 Start: 20167, Stop: 20418, Start Num: 9

Candidate Starts for Eraser_24:

(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: Exile_23 Start: 21855, Stop: 22133, Start Num: 7

Candidate Starts for Exile_23:

(Start: 7 @21855 has 6 MA's), (11, 21882), (17, 21936), (22, 22017),

Gene: FiveHead_26 Start: 18780, Stop: 19064, Start Num: 7

Candidate Starts for FiveHead_26:

(Start: 7 @18780 has 6 MA's), (14, 18852), (26, 18993),

Gene: Flutur_23 Start: 19925, Stop: 20146, Start Num: 8

Candidate Starts for Flutur_23:

(Start: 8 @19925 has 20 MA's), (22, 20081), (23, 20102),

Gene: GrimEater_23 Start: 19192, Stop: 19437, Start Num: 6

Candidate Starts for GrimEater_23:

(6, 19192), (11, 19213), (13, 19240), (16, 19264),

Gene: Iter_23 Start: 19556, Stop: 19798, Start Num: 5

Candidate Starts for Iter_23:

(Start: 5 @19556 has 4 MA's), (11, 19580), (22, 19715), (27, 19778),

Gene: IttyBittyPiggy_22 Start: 18085, Stop: 18336, Start Num: 9

Candidate Starts for IttyBittyPiggy_22:

(Start: 9 @18085 has 18 MA's), (13, 18136), (22, 18244),

Gene: Janeemi_25 Start: 21813, Stop: 22058, Start Num: 9

Candidate Starts for Janeemi_25:

(Start: 9 @21813 has 18 MA's), (11, 21837), (13, 21864), (22, 21972), (28, 22041),

Gene: Jankie_24 Start: 19191, Stop: 19436, Start Num: 6

Candidate Starts for Jankie_24:

(6, 19191), (11, 19212), (13, 19239), (16, 19263),

Gene: JasmineDragon_23 Start: 18773, Stop: 19057, Start Num: 7

Candidate Starts for JasmineDragon_23:

(Start: 7 @18773 has 6 MA's), (26, 18986),

Gene: Joemato_23 Start: 19694, Stop: 19915, Start Num: 8

Candidate Starts for Joemato_23:

(Start: 8 @19694 has 20 MA's), (22, 19850),

Gene: JohnDoe_23 Start: 19689, Stop: 19910, Start Num: 8

Candidate Starts for JohnDoe_23:

(Start: 8 @19689 has 20 MA's), (22, 19845),

Gene: JohnThicc_25 Start: 18780, Stop: 19064, Start Num: 7

Candidate Starts for JohnThicc_25:

(Start: 7 @18780 has 6 MA's), (14, 18852), (26, 18993),

Gene: Jstan_25 Start: 20167, Stop: 20418, Start Num: 9
Candidate Starts for Jstan_25:
(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: JuneStar_23 Start: 20394, Stop: 20642, Start Num: 8
Candidate Starts for JuneStar_23:
(Start: 8 @20394 has 20 MA's), (22, 20550),

Gene: Kaylissa_23 Start: 19695, Stop: 19916, Start Num: 8
Candidate Starts for Kaylissa_23:
(Start: 8 @19695 has 20 MA's), (22, 19851),

Gene: KeAlii_23 Start: 18182, Stop: 18472, Start Num: 10
Candidate Starts for KeAlii_23:
(Start: 10 @18182 has 6 MA's), (16, 18251), (21, 18329), (22, 18335),

Gene: LadyAstra_24 Start: 18779, Stop: 19063, Start Num: 7
Candidate Starts for LadyAstra_24:
(Start: 7 @18779 has 6 MA's), (14, 18851), (26, 18992),

Gene: Lego_23 Start: 19649, Stop: 19870, Start Num: 8
Candidate Starts for Lego_23:
(Start: 8 @19649 has 20 MA's), (22, 19805),

Gene: LisoBros_24 Start: 21215, Stop: 21469, Start Num: 6
Candidate Starts for LisoBros_24:
(6, 21215), (16, 21296), (23, 21401),

Gene: Lizalica_23 Start: 19679, Stop: 19900, Start Num: 8
Candidate Starts for Lizalica_23:
(Start: 8 @19679 has 20 MA's), (22, 19835),

Gene: London_24 Start: 20167, Stop: 20418, Start Num: 9
Candidate Starts for London_24:
(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: MiniMommy_23 Start: 18774, Stop: 19058, Start Num: 7
Candidate Starts for MiniMommy_23:
(Start: 7 @18774 has 6 MA's), (26, 18987),

Gene: MissSwiss_22 Start: 18050, Stop: 18298, Start Num: 9
Candidate Starts for MissSwiss_22:
(Start: 9 @18050 has 18 MA's), (22, 18206),

Gene: Mudpuppy_23 Start: 19692, Stop: 19913, Start Num: 8
Candidate Starts for Mudpuppy_23:
(Start: 8 @19692 has 20 MA's), (22, 19848),

Gene: Niobe_24 Start: 20167, Stop: 20418, Start Num: 9
Candidate Starts for Niobe_24:
(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: Nitro_23 Start: 19547, Stop: 19795, Start Num: 8

Candidate Starts for Nitro_23:

(Start: 8 @19547 has 20 MA's), (13, 19595), (22, 19703),

Gene: ObiToo_23 Start: 18354, Stop: 18602, Start Num: 10

Candidate Starts for ObiToo_23:

(1, 18087), (Start: 10 @18354 has 6 MA's), (11, 18375), (13, 18402),

Gene: Origami_24 Start: 18779, Stop: 19063, Start Num: 7

Candidate Starts for Origami_24:

(Start: 7 @18779 has 6 MA's), (14, 18851), (26, 18992),

Gene: PandaPo_22 Start: 18050, Stop: 18298, Start Num: 9

Candidate Starts for PandaPo_22:

(Start: 9 @18050 has 18 MA's), (22, 18206),

Gene: Phives_25 Start: 21643, Stop: 21885, Start Num: 9

Candidate Starts for Phives_25:

(Start: 9 @21643 has 18 MA's), (11, 21667), (13, 21694), (22, 21802),

Gene: Pixelle_23 Start: 19940, Stop: 20188, Start Num: 8

Candidate Starts for Pixelle_23:

(Start: 8 @19940 has 20 MA's), (13, 19988), (22, 20096),

Gene: Powerpuff_23 Start: 19699, Stop: 19920, Start Num: 8

Candidate Starts for Powerpuff_23:

(Start: 8 @19699 has 20 MA's), (22, 19855),

Gene: Pumpkins_23 Start: 20421, Stop: 20672, Start Num: 8

Candidate Starts for Pumpkins_23:

(Start: 8 @20421 has 20 MA's), (11, 20442), (22, 20577), (24, 20619),

Gene: Reedo_23 Start: 18183, Stop: 18467, Start Num: 10

Candidate Starts for Reedo_23:

(Start: 10 @18183 has 6 MA's), (17, 18258), (22, 18339), (23, 18360),

Gene: Schaffner_23 Start: 20393, Stop: 20644, Start Num: 8

Candidate Starts for Schaffner_23:

(Start: 8 @20393 has 20 MA's), (22, 20549), (24, 20591),

Gene: ShakeltOph_23 Start: 18773, Stop: 19057, Start Num: 7

Candidate Starts for ShakeltOph_23:

(Start: 7 @18773 has 6 MA's), (26, 18986),

Gene: Simpson_25 Start: 19694, Stop: 19915, Start Num: 8

Candidate Starts for Simpson_25:

(Start: 8 @19694 has 20 MA's), (22, 19850),

Gene: Skelbel_25 Start: 20167, Stop: 20418, Start Num: 9

Candidate Starts for Skelbel_25:

(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: Soondubu_23 Start: 21859, Stop: 22137, Start Num: 7

Candidate Starts for Soondubu_23:

(Start: 7 @21859 has 6 MA's), (11, 21886), (17, 21940), (22, 22021),

Gene: Subaru_25 Start: 20167, Stop: 20418, Start Num: 9

Candidate Starts for Subaru_25:

(Start: 9 @20167 has 18 MA's), (13, 20218), (15, 20239), (22, 20326),

Gene: Sue2_23 Start: 18846, Stop: 19097, Start Num: 9

Candidate Starts for Sue2_23:

(Start: 9 @18846 has 18 MA's), (16, 18921), (23, 19026),

Gene: Tallboi_23 Start: 19526, Stop: 19774, Start Num: 8

Candidate Starts for Tallboi_23:

(Start: 8 @19526 has 20 MA's), (13, 19574), (22, 19682),

Gene: Tbone_23 Start: 19699, Stop: 19920, Start Num: 8

Candidate Starts for Tbone_23:

(Start: 8 @19699 has 20 MA's), (22, 19855), (23, 19876),

Gene: TforTroy_24 Start: 20302, Stop: 20556, Start Num: 9

Candidate Starts for TforTroy_24:

(Start: 9 @20302 has 18 MA's), (11, 20326), (24, 20503),

Gene: Tian_23 Start: 19937, Stop: 20185, Start Num: 8

Candidate Starts for Tian_23:

(Start: 8 @19937 has 20 MA's), (22, 20093),

Gene: Tuck_25 Start: 21786, Stop: 22028, Start Num: 9

Candidate Starts for Tuck_25:

(Start: 9 @21786 has 18 MA's), (11, 21810), (13, 21837), (22, 21945),

Gene: Turab_23 Start: 19547, Stop: 19798, Start Num: 9

Candidate Starts for Turab_23:

(Start: 9 @19547 has 18 MA's), (22, 19703),

Gene: Tutumahutu_23 Start: 19699, Stop: 19920, Start Num: 8

Candidate Starts for Tutumahutu_23:

(Start: 8 @19699 has 20 MA's), (22, 19855),

Gene: VResidence_23 Start: 18257, Stop: 18508, Start Num: 9

Candidate Starts for VResidence_23:

(Start: 9 @18257 has 18 MA's), (16, 18332), (20, 18389), (22, 18416),

Gene: VroomVroom_23 Start: 18784, Stop: 19068, Start Num: 7

Candidate Starts for VroomVroom_23:

(Start: 7 @18784 has 6 MA's), (26, 18997), (29, 19039),

Gene: Warda_23 Start: 19691, Stop: 19912, Start Num: 8

Candidate Starts for Warda_23:

(Start: 8 @19691 has 20 MA's), (22, 19847),

Gene: Wildwest_24 Start: 19604, Stop: 19855, Start Num: 9

Candidate Starts for Wildwest_24:

(Start: 9 @19604 has 18 MA's), (11, 19628), (16, 19679), (22, 19763),

Gene: Yang_23 Start: 19688, Stop: 19939, Start Num: 9

Candidate Starts for Yang_23:

(Start: 9 @19688 has 18 MA's), (24, 19886),

Gene: YesChef_23 Start: 19699, Stop: 19920, Start Num: 8

Candidate Starts for YesChef_23:

(Start: 8 @19699 has 20 MA's), (22, 19855),