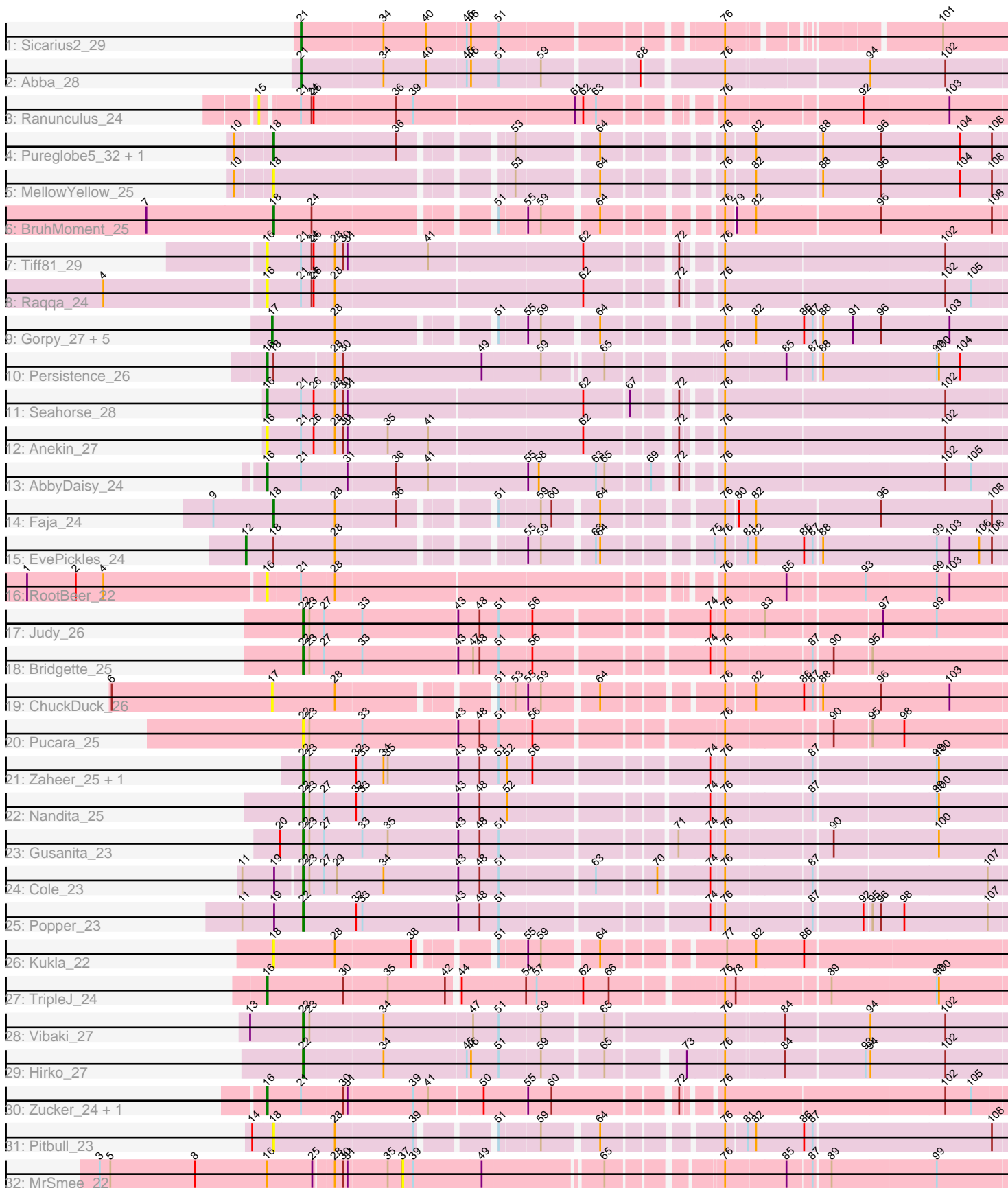


Pham 161998



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 161998 Report

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

Pham number 161998 has 40 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Sicarius2_29
- Track 2 : Abba_28
- Track 3 : Ranunculus_24
- Track 4 : Pureglobe5_32, Beagle_31
- Track 5 : MellowYellow_25
- Track 6 : BruhMoment_25
- Track 7 : Tiff81_29
- Track 8 : Raqqa_24
- Track 9 : Gorpy_27, Raphaella_28, BillyTP_27, Phrank15_27, Sakai_27, Isolde_27
- Track 10 : Persistence_26
- Track 11 : Seahorse_28
- Track 12 : Anekin_27
- Track 13 : AbbyDaisy_24
- Track 14 : Faja_24
- Track 15 : EvePickles_24
- Track 16 : RootBeer_22
- Track 17 : Judy_26
- Track 18 : Bridgette_25
- Track 19 : ChuckDuck_26
- Track 20 : Pucara_25
- Track 21 : Zaheer_25, Ryan_25
- Track 22 : Nandita_25
- Track 23 : Gusanita_23
- Track 24 : Cole_23
- Track 25 : Popper_23
- Track 26 : Kukla_22
- Track 27 : TripleJ_24
- Track 28 : Vibaki_27
- Track 29 : Hirko_27
- Track 30 : Zucker_24, Bauer_25
- Track 31 : Pitbull_23
- Track 32 : MrSmee_22

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

The start number called the most often in the published annotations is 22, it was called in 10 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bridgette_25, Cole_23, Gusanita_23, Hirko_27, Judy_26, Nandita_25, Popper_23, Pucara_25, Ryan_25, Vibaki_27, Zaheer_25,

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

-

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

- Abba_28, AbbyDaisy_24, Anekin_27, Bauer_25, Beagle_31, BillyTP_27, BruhMoment_25, ChuckDuck_26, EvePickles_24, Faja_24, Gorpy_27, Isolde_27, Kukla_22, MellowYellow_25, MrSmee_22, Persistence_26, Phrank15_27, Pitbull_23, Pureglobe5_32, Ranunculus_24, Raphaella_28, Raqqa_24, RootBeer_22, Sakai_27, Seahorse_28, Sicarius2_29, Tiff81_29, TripleJ_24, Zucker_24,

Summary by start number:

Start 12:

- Found in 1 of 40 (2.5%) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EvePickles_24 (AY),

Start 15:

- Found in 1 of 40 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus_24 (AP),

Start 16:

- Found in 11 of 40 (27.5%) of genes in pham
- Manual Annotations of this start: 6 of 26
- Called 90.9% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_24 (AY), Anekin_27 (AY), Bauer_25 (FN), Persistence_26 (AY), Raqqa_24 (AY), RootBeer_22 (FA), Seahorse_28 (AY), Tiff81_29 (AY), TripleJ_24 (FJ), Zucker_24 (FN),

Start 17:

- Found in 7 of 40 (17.5%) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillyTP_27 (AY), ChuckDuck_26 (FA), Gorpy_27 (AY), Isolde_27 (AY), Phrank15_27 (AY), Raphaella_28 (AY), Sakai_27 (AY),

Start 18:

- Found in 9 of 40 (22.5%) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 77.8% of time when present

- Phage (with cluster) where this start called: Beagle_31 (AP2), BruhMoment_25 (AP3), Faja_24 (AY), Kukla_22 (FJ), MellowYellow_25 (AP2), Pitbull_23 (FQ), Pureglobe5_32 (AP2),

Start 21:

- Found in 11 of 40 (27.5%) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Abba_28 (AO3), Sicarius2_29 (AO2),

Start 22:

- Found in 11 of 40 (27.5%) of genes in pham
- Manual Annotations of this start: 10 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette_25 (FA), Cole_23 (FF), Gusanita_23 (FF), Hirko_27 (FL), Judy_26 (FA), Nandita_25 (FF), Popper_23 (FF), Pucara_25 (FA), Ryan_25 (FF), Vibaki_27 (FL), Zaheer_25 (FF),

Start 37:

- Found in 1 of 40 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MrSmee_22 (UNK),

Summary by clusters:

There are 13 clusters represented in this pham: FQ, AP, AP2, AP3, FA, AO3, AO2, FF, AY, FJ, UNK, FL, FN,

Info for manual annotations of cluster AO2:

- Start number 21 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 21 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AP2:

- Start number 18 was manually annotated 2 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 18 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AY:

- Start number 12 was manually annotated 1 time for cluster AY.
- Start number 16 was manually annotated 3 times for cluster AY.
- Start number 17 was manually annotated 3 times for cluster AY.
- Start number 18 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FA:

- Start number 22 was manually annotated 2 times for cluster FA.

Info for manual annotations of cluster FF:

- Start number 22 was manually annotated 6 times for cluster FF.

Info for manual annotations of cluster FJ:

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

Info for manual annotations of cluster FL:

- Start number 22 was manually annotated 2 times for cluster FL.

Info for manual annotations of cluster FN:

- Start number 16 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: Abba_28 Start: 23837, Stop: 24787, Start Num: 21

Candidate Starts for Abba_28:

(Start: 21 @23837 has 2 MA's), (34, 23951), (40, 24011), (45, 24065), (46, 24071), (51, 24110), (59, 24167), (68, 24287), (76, 24389), (94, 24572), (102, 24677),

Gene: AbbyDaisy_24 Start: 18360, Stop: 19346, Start Num: 16

Candidate Starts for AbbyDaisy_24:

(Start: 16 @18360 has 6 MA's), (Start: 21 @18408 has 2 MA's), (31, 18471), (36, 18537), (41, 18582), (55, 18714), (58, 18729), (63, 18810), (65, 18822), (69, 18876), (72, 18903), (76, 18945), (102, 19245), (105, 19281),

Gene: Anekin_27 Start: 19364, Stop: 20353, Start Num: 16

Candidate Starts for Anekin_27:

(Start: 16 @19364 has 6 MA's), (Start: 21 @19412 has 2 MA's), (26, 19430), (28, 19457), (30, 19469), (31, 19475), (35, 19529), (41, 19586), (62, 19796), (72, 19907), (76, 19949), (102, 20252),

Gene: Bauer_25 Start: 19072, Stop: 20058, Start Num: 16

Candidate Starts for Bauer_25:

(Start: 16 @19072 has 6 MA's), (Start: 21 @19120 has 2 MA's), (30, 19177), (31, 19183), (39, 19273), (41, 19294), (50, 19366), (55, 19426), (60, 19459), (72, 19615), (76, 19657), (102, 19957), (105, 19993),

Gene: Beagle_31 Start: 18239, Stop: 19177, Start Num: 18

Candidate Starts for Beagle_31:

(10, 18191), (Start: 18 @18239 has 4 MA's), (36, 18410), (53, 18539), (64, 18644), (76, 18776), (82, 18812), (88, 18899), (96, 18980), (104, 19091), (108, 19133),

Gene: BillyTP_27 Start: 19185, Stop: 20132, Start Num: 17

Candidate Starts for BillyTP_27:

(Start: 17 @19185 has 3 MA's), (28, 19272), (51, 19464), (55, 19500), (59, 19518), (64, 19590), (76, 19731), (82, 19767), (86, 19833), (87, 19845), (88, 19854), (91, 19896), (96, 19935), (103, 20031),

Gene: Bridgette_25 Start: 19437, Stop: 20381, Start Num: 22

Candidate Starts for Bridgette_25:

(Start: 22 @19437 has 10 MA's), (23, 19446), (27, 19467), (33, 19521), (43, 19653), (47, 19674), (48, 19683), (51, 19710), (56, 19755), (74, 19968), (76, 19986), (87, 20097), (90, 20121), (95, 20172),

Gene: BruhMoment_25 Start: 17728, Stop: 18663, Start Num: 18

Candidate Starts for BruhMoment_25:

(7, 17551), (Start: 18 @17728 has 4 MA's), (24, 17779), (51, 18004), (55, 18040), (59, 18058), (64, 18130), (76, 18262), (79, 18271), (82, 18298), (96, 18466), (108, 18619),

Gene: ChuckDuck_26 Start: 19302, Stop: 20249, Start Num: 17

Candidate Starts for ChuckDuck_26:

(6, 19077), (Start: 17 @19302 has 3 MA's), (28, 19389), (51, 19581), (53, 19602), (55, 19617), (59, 19635), (64, 19707), (76, 19848), (82, 19884), (86, 19950), (87, 19962), (88, 19971), (96, 20052), (103, 20148),

Gene: Cole_23 Start: 18430, Stop: 19374, Start Num: 22

Candidate Starts for Cole_23:

(11, 18352), (19, 18397), (Start: 22 @18430 has 10 MA's), (23, 18439), (27, 18460), (29, 18478), (34, 18544), (43, 18646), (48, 18676), (51, 18703), (63, 18829), (70, 18898), (74, 18961), (76, 18979), (87, 19090), (107, 19327),

Gene: EvePickles_24 Start: 17997, Stop: 18980, Start Num: 12

Candidate Starts for EvePickles_24:

(Start: 12 @17997 has 1 MA's), (Start: 18 @18036 has 4 MA's), (28, 18120), (55, 18348), (59, 18366), (63, 18432), (64, 18438), (75, 18564), (76, 18579), (81, 18603), (82, 18615), (86, 18681), (87, 18693), (88, 18702), (99, 18861), (103, 18879), (106, 18921), (108, 18936),

Gene: Faja_24 Start: 17929, Stop: 18873, Start Num: 18

Candidate Starts for Faja_24:

(9, 17845), (Start: 18 @17929 has 4 MA's), (28, 18013), (36, 18097), (51, 18205), (59, 18259), (60, 18274), (64, 18331), (76, 18472), (80, 18484), (82, 18508), (96, 18676), (108, 18829),

Gene: Gorpy_27 Start: 19410, Stop: 20357, Start Num: 17

Candidate Starts for Gorpy_27:

(Start: 17 @19410 has 3 MA's), (28, 19497), (51, 19689), (55, 19725), (59, 19743), (64, 19815), (76, 19956), (82, 19992), (86, 20058), (87, 20070), (88, 20079), (91, 20121), (96, 20160), (103, 20256),

Gene: Gusanita_23 Start: 18476, Stop: 19420, Start Num: 22

Candidate Starts for Gusanita_23:

(20, 18443), (Start: 22 @18476 has 10 MA's), (23, 18485), (27, 18506), (33, 18560), (35, 18596), (43, 18692), (48, 18722), (51, 18749), (71, 18965), (74, 19007), (76, 19025), (90, 19160), (100, 19304),

Gene: Hirko_27 Start: 25896, Stop: 26837, Start Num: 22

Candidate Starts for Hirko_27:

(Start: 22 @25896 has 10 MA's), (34, 26004), (45, 26118), (46, 26124), (51, 26163), (59, 26220), (65, 26298), (73, 26391), (76, 26439), (84, 26511), (93, 26619), (94, 26625), (102, 26730),

Gene: Isolde_27 Start: 19236, Stop: 20183, Start Num: 17

Candidate Starts for Isolde_27:

(Start: 17 @19236 has 3 MA's), (28, 19323), (51, 19515), (55, 19551), (59, 19569), (64, 19641), (76, 19782), (82, 19818), (86, 19884), (87, 19896), (88, 19905), (91, 19947), (96, 19986), (103, 20082),

Gene: Judy_26 Start: 19687, Stop: 20631, Start Num: 22

Candidate Starts for Judy_26:

(Start: 22 @19687 has 10 MA's), (23, 19696), (27, 19717), (33, 19771), (43, 19903), (48, 19933), (51, 19960), (56, 20005), (74, 20218), (76, 20236), (83, 20284), (97, 20437), (99, 20512),

Gene: Kukla_22 Start: 17420, Stop: 18367, Start Num: 18

Candidate Starts for Kukla_22:

(Start: 18 @17420 has 4 MA's), (28, 17504), (38, 17609), (51, 17696), (55, 17732), (59, 17750), (64, 17822), (77, 17966), (82, 18005), (86, 18071),

Gene: MellowYellow_25 Start: 16974, Stop: 17912, Start Num: 18

Candidate Starts for MellowYellow_25:

(10, 16926), (Start: 18 @16974 has 4 MA's), (53, 17274), (64, 17379), (76, 17511), (82, 17547), (88, 17634), (96, 17715), (104, 17826), (108, 17868),

Gene: MrSmee_22 Start: 17272, Stop: 18069, Start Num: 37

Candidate Starts for MrSmee_22:

(3, 16855), (5, 16870), (8, 16990), (Start: 16 @17092 has 6 MA's), (25, 17155), (28, 17179), (30, 17191), (31, 17197), (35, 17251), (37, 17272), (39, 17287), (49, 17383), (65, 17539), (76, 17671), (85, 17749), (87, 17782), (89, 17803), (99, 17947),

Gene: Nandita_25 Start: 18629, Stop: 19573, Start Num: 22

Candidate Starts for Nandita_25:

(Start: 22 @18629 has 10 MA's), (23, 18638), (27, 18659), (32, 18704), (33, 18713), (43, 18845), (48, 18875), (52, 18914), (74, 19160), (76, 19178), (87, 19289), (99, 19454), (100, 19457),

Gene: Persistence_26 Start: 19282, Stop: 20262, Start Num: 16

Candidate Starts for Persistence_26:

(Start: 16 @19282 has 6 MA's), (Start: 18 @19291 has 4 MA's), (28, 19369), (30, 19381), (49, 19573), (59, 19654), (65, 19729), (76, 19867), (85, 19945), (87, 19978), (88, 19987), (99, 20143), (100, 20146), (104, 20176),

Gene: Phrank15_27 Start: 19335, Stop: 20282, Start Num: 17

Candidate Starts for Phrank15_27:

(Start: 17 @19335 has 3 MA's), (28, 19422), (51, 19614), (55, 19650), (59, 19668), (64, 19740), (76, 19881), (82, 19917), (86, 19983), (87, 19995), (88, 20004), (91, 20046), (96, 20085), (103, 20181),

Gene: Pitbull_23 Start: 16646, Stop: 17593, Start Num: 18

Candidate Starts for Pitbull_23:

(14, 16619), (Start: 18 @16646 has 4 MA's), (28, 16730), (39, 16838), (51, 16925), (59, 16979), (64, 17051), (76, 17192), (81, 17216), (82, 17228), (86, 17294), (87, 17306), (108, 17549),

Gene: Popper_23 Start: 18534, Stop: 19478, Start Num: 22

Candidate Starts for Popper_23:

(11, 18450), (19, 18495), (Start: 22 @18534 has 10 MA's), (32, 18609), (33, 18618), (43, 18750), (48, 18780), (51, 18807), (74, 19065), (76, 19083), (87, 19194), (92, 19260), (95, 19269), (96, 19281), (98, 19314), (107, 19431),

Gene: Pucara_25 Start: 19341, Stop: 20285, Start Num: 22

Candidate Starts for Pucara_25:

(Start: 22 @19341 has 10 MA's), (23, 19350), (33, 19425), (43, 19557), (48, 19587), (51, 19614), (56, 19659), (76, 19890), (90, 20025), (95, 20076), (98, 20121),

Gene: Pureglobe5_32 Start: 18448, Stop: 19386, Start Num: 18

Candidate Starts for Pureglobe5_32:

(10, 18400), (Start: 18 @18448 has 4 MA's), (36, 18619), (53, 18748), (64, 18853), (76, 18985), (82, 19021), (88, 19108), (96, 19189), (104, 19300), (108, 19342),

Gene: Ranunculus_24 Start: 17342, Stop: 18316, Start Num: 15

Candidate Starts for Ranunculus_24:

(15, 17342), (Start: 21 @17390 has 2 MA's), (24, 17405), (26, 17408), (36, 17519), (39, 17543), (61, 17762), (62, 17774), (63, 17792), (76, 17924), (92, 18101), (103, 18218),

Gene: Raphaella_28 Start: 19401, Stop: 20348, Start Num: 17

Candidate Starts for Raphaella_28:

(Start: 17 @19401 has 3 MA's), (28, 19488), (51, 19680), (55, 19716), (59, 19734), (64, 19806), (76, 19947), (82, 19983), (86, 20049), (87, 20061), (88, 20070), (91, 20112), (96, 20151), (103, 20247),

Gene: Raqqa_24 Start: 18653, Stop: 19639, Start Num: 16

Candidate Starts for Raqqa_24:

(4, 18428), (Start: 16 @18653 has 6 MA's), (Start: 21 @18701 has 2 MA's), (24, 18716), (26, 18719), (28, 18746), (62, 19085), (72, 19196), (76, 19238), (102, 19538), (105, 19574),

Gene: RootBeer_22 Start: 17010, Stop: 17987, Start Num: 16

Candidate Starts for RootBeer_22:

(1, 16677), (2, 16746), (4, 16785), (Start: 16 @17010 has 6 MA's), (Start: 21 @17055 has 2 MA's), (28, 17100), (76, 17592), (85, 17670), (93, 17772), (99, 17868), (103, 17886),

Gene: Ryan_25 Start: 19219, Stop: 20163, Start Num: 22

Candidate Starts for Ryan_25:

(Start: 22 @19219 has 10 MA's), (23, 19228), (32, 19294), (33, 19303), (34, 19333), (35, 19339), (43, 19435), (48, 19465), (51, 19492), (52, 19504), (56, 19537), (74, 19750), (76, 19768), (87, 19879), (99, 20044), (100, 20047),

Gene: Sakai_27 Start: 19410, Stop: 20357, Start Num: 17

Candidate Starts for Sakai_27:

(Start: 17 @19410 has 3 MA's), (28, 19497), (51, 19689), (55, 19725), (59, 19743), (64, 19815), (76, 19956), (82, 19992), (86, 20058), (87, 20070), (88, 20079), (91, 20121), (96, 20160), (103, 20256),

Gene: Seahorse_28 Start: 19765, Stop: 20751, Start Num: 16

Candidate Starts for Seahorse_28:

(Start: 16 @19765 has 6 MA's), (Start: 21 @19813 has 2 MA's), (26, 19831), (28, 19858), (30, 19870), (31, 19876), (62, 20197), (67, 20257), (72, 20308), (76, 20350), (102, 20650),

Gene: Sicarius2_29 Start: 24015, Stop: 24896, Start Num: 21

Candidate Starts for Sicarius2_29:

(Start: 21 @24015 has 2 MA's), (34, 24129), (40, 24189), (45, 24243), (46, 24249), (51, 24288), (76, 24549), (101, 24783),

Gene: Tiff81_29 Start: 19493, Stop: 20479, Start Num: 16

Candidate Starts for Tiff81_29:

(Start: 16 @19493 has 6 MA's), (Start: 21 @19541 has 2 MA's), (24, 19556), (26, 19559), (28, 19586), (30, 19598), (31, 19604), (41, 19715), (62, 19925), (72, 20036), (76, 20078), (102, 20378),

Gene: TripleJ_24 Start: 18283, Stop: 19278, Start Num: 16

Candidate Starts for TripleJ_24:

(Start: 16 @18283 has 6 MA's), (30, 18391), (35, 18451), (42, 18532), (44, 18544), (54, 18631), (57, 18646), (62, 18709), (66, 18745), (76, 18883), (78, 18895), (89, 19015), (99, 19159), (100, 19162),

Gene: Vibaki_27 Start: 25425, Stop: 26384, Start Num: 22

Candidate Starts for Vibaki_27:

(13, 25350), (Start: 22 @25425 has 10 MA's), (23, 25434), (34, 25533), (47, 25656), (51, 25692), (59, 25749), (65, 25827), (76, 25986), (84, 26058), (94, 26172), (102, 26277),

Gene: Zaheer_25 Start: 19308, Stop: 20252, Start Num: 22

Candidate Starts for Zaheer_25:

(Start: 22 @19308 has 10 MA's), (23, 19317), (32, 19383), (33, 19392), (34, 19422), (35, 19428), (43, 19524), (48, 19554), (51, 19581), (52, 19593), (56, 19626), (74, 19839), (76, 19857), (87, 19968), (99, 20133), (100, 20136),

Gene: Zucker_24 Start: 18385, Stop: 19371, Start Num: 16

Candidate Starts for Zucker_24:

(Start: 16 @18385 has 6 MA's), (Start: 21 @18433 has 2 MA's), (30, 18490), (31, 18496), (39, 18586), (41, 18607), (50, 18679), (55, 18739), (60, 18772), (72, 18928), (76, 18970), (102, 19270), (105, 19306),