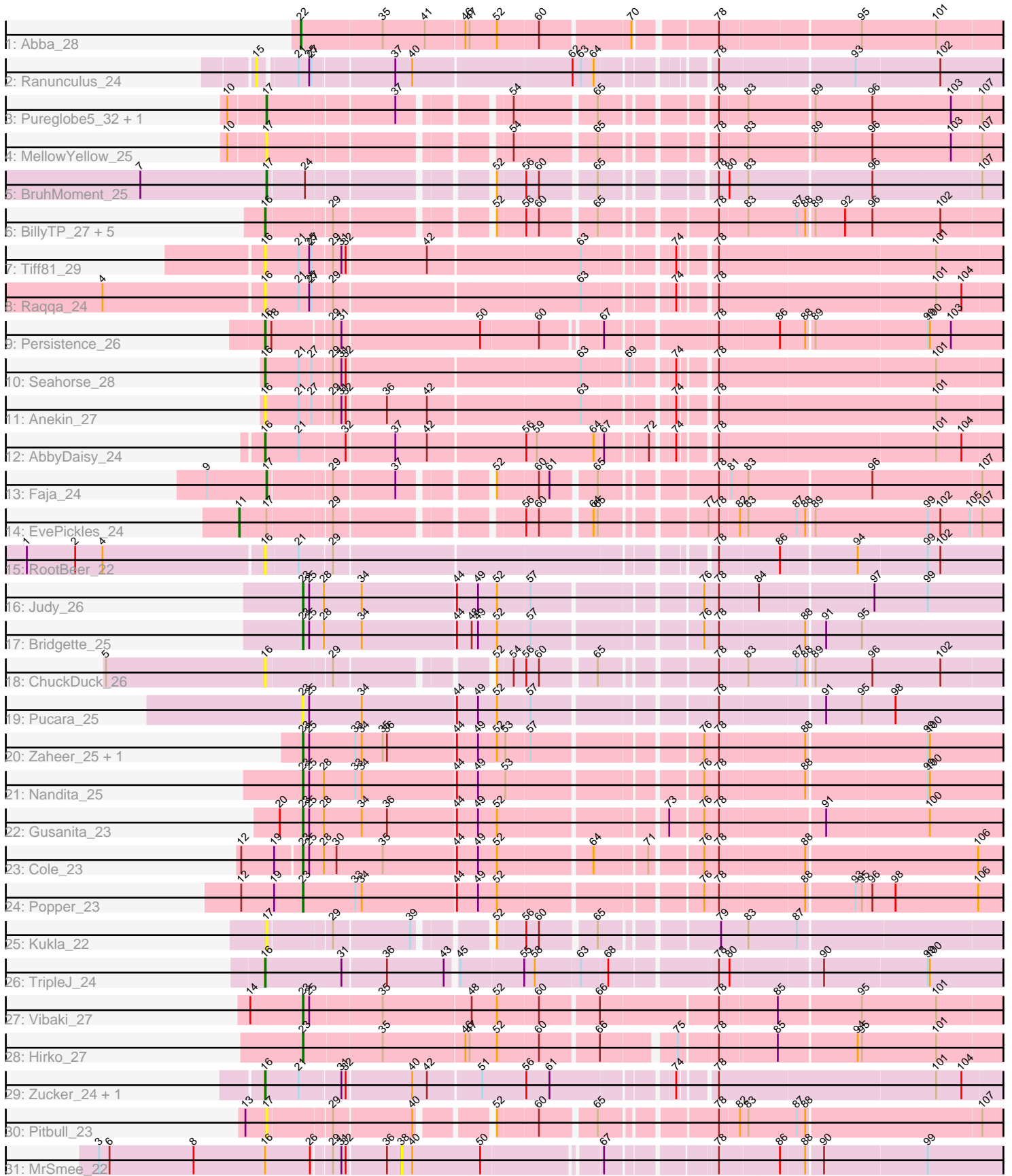


Pham 165147



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 165147 Report

This analysis was run 07/09/24 on database version 566.

Pham number 165147 has 39 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Abba_28
- Track 2 : Ranunculus_24
- Track 3 : Pureglobe5_32, Beagle_31
- Track 4 : MellowYellow_25
- Track 5 : BruhMoment_25
- Track 6 : BillyTP_27, Gorpy_27, Raphaella_27, Phrank15_27, Sakai_27, Isolde_27
- Track 7 : Tiff81_29
- Track 8 : Raqqa_24
- Track 9 : Persistence_26
- Track 10 : Seahorse_28
- Track 11 : Anekin_27
- Track 12 : AbbyDaisy_24
- Track 13 : Faja_24
- Track 14 : EvePickles_24
- Track 15 : RootBeer_22
- Track 16 : Judy_26
- Track 17 : Bridgette_25
- Track 18 : ChuckDuck_26
- Track 19 : Pucara_25
- Track 20 : Zaheer_25, Ryan_25
- Track 21 : Nandita_25
- Track 22 : Gusanita_23
- Track 23 : Cole_23
- Track 24 : Popper_23
- Track 25 : Kukla_22
- Track 26 : TripleJ_24
- Track 27 : Vibaki_27
- Track 28 : Hirko_27
- Track 29 : Zucker_24, Bauer_25
- Track 30 : Pitbull_23
- Track 31 : 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 23, 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_27, Raqqa_24, RootBeer_22, Sakai_27, Seahorse_28, Tiff81_29, TripleJ_24, Zucker_24,

Summary by start number:

Start 11:

- Found in 1 of 39 (2.6%) 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 39 (2.6%) 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 18 of 39 (46.2%) of genes in pham
- Manual Annotations of this start: 10 of 26
- Called 94.4% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_24 (AY), Anekin_27 (AY), Bauer_25 (FN), BillyTP_27 (AY), ChuckDuck_26 (FA), Gorpy_27 (AY), Isolde_27 (AY), Persistence_26 (AY), Phrank15_27 (AY), Raphaella_27 (AY), Raqqa_24 (AY), RootBeer_22 (FA), Sakai_27 (AY), Seahorse_28 (AY), Tiff81_29 (AY), TripleJ_24 (FJ), Zucker_24 (FN),

Start 17:

- Found in 8 of 39 (20.5%) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 87.5% 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 22:

- Found in 1 of 39 (2.6%) 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: Abba_28 (AO3),

Start 23:

- Found in 11 of 39 (28.2%) 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 38:

- Found in 1 of 39 (2.6%) 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 12 clusters represented in this pham: FQ, AP, AP2, AP3, FA, AO3, FF, AY, FJ, UNK, FL, FN,

Info for manual annotations of cluster AO3:

- Start number 22 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AP2:

- Start number 17 was manually annotated 2 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 17 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AY:

- Start number 11 was manually annotated 1 time for cluster AY.
- Start number 16 was manually annotated 7 times for cluster AY.
- Start number 17 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FF:

- Start number 23 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 23 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: 22

Candidate Starts for Abba_28:

(Start: 22 @23837 has 1 MA's), (35, 23951), (41, 24011), (46, 24065), (47, 24071), (52, 24110), (60, 24167), (70, 24287), (78, 24389), (95, 24572), (101, 24677),

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

Candidate Starts for AbbyDaisy_24:

(Start: 16 @18360 has 10 MA's), (21, 18408), (32, 18471), (37, 18537), (42, 18582), (56, 18714), (59, 18729), (64, 18810), (67, 18822), (72, 18876), (74, 18903), (78, 18945), (101, 19245), (104, 19281),

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

Candidate Starts for Anekin_27:

(Start: 16 @19364 has 10 MA's), (21, 19412), (27, 19430), (29, 19457), (31, 19469), (32, 19475), (36, 19529), (42, 19586), (63, 19796), (74, 19907), (78, 19949), (101, 20252),

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

Candidate Starts for Bauer_25:

(Start: 16 @19072 has 10 MA's), (21, 19120), (31, 19177), (32, 19183), (40, 19273), (42, 19294), (51, 19366), (56, 19426), (61, 19459), (74, 19615), (78, 19657), (101, 19957), (104, 19993),

Gene: Beagle_31 Start: 18239, Stop: 19177, Start Num: 17

Candidate Starts for Beagle_31:

(10, 18191), (Start: 17 @18239 has 4 MA's), (37, 18410), (54, 18539), (65, 18644), (78, 18776), (83, 18812), (89, 18899), (96, 18980), (103, 19091), (107, 19133),

Gene: BillyTP_27 Start: 19185, Stop: 20132, Start Num: 16

Candidate Starts for BillyTP_27:

(Start: 16 @19185 has 10 MA's), (29, 19272), (52, 19464), (56, 19500), (60, 19518), (65, 19590), (78, 19731), (83, 19767), (87, 19833), (88, 19845), (89, 19854), (92, 19896), (96, 19935), (102, 20031),

Gene: Bridgette_25 Start: 19437, Stop: 20381, Start Num: 23

Candidate Starts for Bridgette_25:

(Start: 23 @19437 has 10 MA's), (25, 19446), (28, 19467), (34, 19521), (44, 19653), (48, 19674), (49, 19683), (52, 19710), (57, 19755), (76, 19968), (78, 19986), (88, 20097), (91, 20121), (95, 20172),

Gene: BruhMoment_25 Start: 17728, Stop: 18663, Start Num: 17

Candidate Starts for BruhMoment_25:

(7, 17551), (Start: 17 @17728 has 4 MA's), (24, 17779), (52, 18004), (56, 18040), (60, 18058), (65, 18130), (78, 18262), (80, 18271), (83, 18298), (96, 18466), (107, 18619),

Gene: ChuckDuck_26 Start: 19302, Stop: 20249, Start Num: 16

Candidate Starts for ChuckDuck_26:

(5, 19077), (Start: 16 @19302 has 10 MA's), (29, 19389), (52, 19581), (54, 19602), (56, 19617), (60, 19635), (65, 19707), (78, 19848), (83, 19884), (87, 19950), (88, 19962), (89, 19971), (96, 20052), (102, 20148),

Gene: Cole_23 Start: 18430, Stop: 19374, Start Num: 23

Candidate Starts for Cole_23:

(12, 18352), (19, 18397), (Start: 23 @18430 has 10 MA's), (25, 18439), (28, 18460), (30, 18478), (35, 18544), (44, 18646), (49, 18676), (52, 18703), (64, 18829), (71, 18898), (76, 18961), (78, 18979), (88, 19090), (106, 19327),

Gene: EvePickles_24 Start: 17997, Stop: 18980, Start Num: 11

Candidate Starts for EvePickles_24:

(Start: 11 @17997 has 1 MA's), (Start: 17 @18036 has 4 MA's), (29, 18120), (56, 18348), (60, 18366), (64, 18432), (65, 18438), (77, 18564), (78, 18579), (82, 18603), (83, 18615), (87, 18681), (88, 18693), (89, 18702), (99, 18861), (102, 18879), (105, 18921), (107, 18936),

Gene: Faja_24 Start: 17929, Stop: 18873, Start Num: 17

Candidate Starts for Faja_24:

(9, 17845), (Start: 17 @17929 has 4 MA's), (29, 18013), (37, 18097), (52, 18205), (60, 18259), (61, 18274), (65, 18331), (78, 18472), (81, 18484), (83, 18508), (96, 18676), (107, 18829),

Gene: Gorpy_27 Start: 19410, Stop: 20357, Start Num: 16

Candidate Starts for Gorpy_27:

(Start: 16 @19410 has 10 MA's), (29, 19497), (52, 19689), (56, 19725), (60, 19743), (65, 19815), (78, 19956), (83, 19992), (87, 20058), (88, 20070), (89, 20079), (92, 20121), (96, 20160), (102, 20256),

Gene: Gusanita_23 Start: 18476, Stop: 19420, Start Num: 23

Candidate Starts for Gusanita_23:

(20, 18443), (Start: 23 @18476 has 10 MA's), (25, 18485), (28, 18506), (34, 18560), (36, 18596), (44, 18692), (49, 18722), (52, 18749), (73, 18965), (76, 19007), (78, 19025), (91, 19160), (100, 19304),

Gene: Hirko_27 Start: 25896, Stop: 26837, Start Num: 23

Candidate Starts for Hirko_27:

(Start: 23 @25896 has 10 MA's), (35, 26004), (46, 26118), (47, 26124), (52, 26163), (60, 26220), (66, 26298), (75, 26391), (78, 26439), (85, 26511), (94, 26619), (95, 26625), (101, 26730),

Gene: Isolde_27 Start: 19236, Stop: 20183, Start Num: 16

Candidate Starts for Isolde_27:

(Start: 16 @19236 has 10 MA's), (29, 19323), (52, 19515), (56, 19551), (60, 19569), (65, 19641), (78, 19782), (83, 19818), (87, 19884), (88, 19896), (89, 19905), (92, 19947), (96, 19986), (102, 20082),

Gene: Judy_26 Start: 19687, Stop: 20631, Start Num: 23

Candidate Starts for Judy_26:

(Start: 23 @19687 has 10 MA's), (25, 19696), (28, 19717), (34, 19771), (44, 19903), (49, 19933), (52, 19960), (57, 20005), (76, 20218), (78, 20236), (84, 20284), (97, 20437), (99, 20512),

Gene: Kukla_22 Start: 17420, Stop: 18367, Start Num: 17

Candidate Starts for Kukla_22:

(Start: 17 @17420 has 4 MA's), (29, 17504), (39, 17609), (52, 17696), (56, 17732), (60, 17750), (65, 17822), (79, 17966), (83, 18005), (87, 18071),

Gene: MellowYellow_25 Start: 16974, Stop: 17912, Start Num: 17

Candidate Starts for MellowYellow_25:

(10, 16926), (Start: 17 @16974 has 4 MA's), (54, 17274), (65, 17379), (78, 17511), (83, 17547), (89, 17634), (96, 17715), (103, 17826), (107, 17868),

Gene: MrSmee_22 Start: 17272, Stop: 18069, Start Num: 38

Candidate Starts for MrSmee_22:

(3, 16855), (6, 16870), (8, 16990), (Start: 16 @17092 has 10 MA's), (26, 17155), (29, 17179), (31, 17191), (32, 17197), (36, 17251), (38, 17272), (40, 17287), (50, 17383), (67, 17539), (78, 17671), (86, 17749), (88, 17782), (90, 17803), (99, 17947),

Gene: Nandita_25 Start: 18629, Stop: 19573, Start Num: 23

Candidate Starts for Nandita_25:

(Start: 23 @18629 has 10 MA's), (25, 18638), (28, 18659), (33, 18704), (34, 18713), (44, 18845), (49, 18875), (53, 18914), (76, 19160), (78, 19178), (88, 19289), (99, 19454), (100, 19457),

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

Candidate Starts for Persistence_26:

(Start: 16 @19282 has 10 MA's), (18, 19291), (29, 19369), (31, 19381), (50, 19573), (60, 19654), (67, 19729), (78, 19867), (86, 19945), (88, 19978), (89, 19987), (99, 20143), (100, 20146), (103, 20176),

Gene: Phrank15_27 Start: 19335, Stop: 20282, Start Num: 16

Candidate Starts for Phrank15_27:

(Start: 16 @19335 has 10 MA's), (29, 19422), (52, 19614), (56, 19650), (60, 19668), (65, 19740), (78, 19881), (83, 19917), (87, 19983), (88, 19995), (89, 20004), (92, 20046), (96, 20085), (102, 20181),

Gene: Pitbull_23 Start: 16646, Stop: 17593, Start Num: 17

Candidate Starts for Pitbull_23:

(13, 16619), (Start: 17 @16646 has 4 MA's), (29, 16730), (40, 16838), (52, 16925), (60, 16979), (65, 17051), (78, 17192), (82, 17216), (83, 17228), (87, 17294), (88, 17306), (107, 17549),

Gene: Popper_23 Start: 18534, Stop: 19478, Start Num: 23

Candidate Starts for Popper_23:

(12, 18450), (19, 18495), (Start: 23 @18534 has 10 MA's), (33, 18609), (34, 18618), (44, 18750), (49, 18780), (52, 18807), (76, 19065), (78, 19083), (88, 19194), (93, 19260), (95, 19269), (96, 19281), (98, 19314), (106, 19431),

Gene: Pucara_25 Start: 19341, Stop: 20285, Start Num: 23

Candidate Starts for Pucara_25:

(Start: 23 @19341 has 10 MA's), (25, 19350), (34, 19425), (44, 19557), (49, 19587), (52, 19614), (57, 19659), (78, 19890), (91, 20025), (95, 20076), (98, 20121),

Gene: Pureglobe5_32 Start: 18448, Stop: 19386, Start Num: 17

Candidate Starts for Pureglobe5_32:

(10, 18400), (Start: 17 @18448 has 4 MA's), (37, 18619), (54, 18748), (65, 18853), (78, 18985), (83, 19021), (89, 19108), (96, 19189), (103, 19300), (107, 19342),

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

Candidate Starts for Ranunculus_24:

(15, 17342), (21, 17390), (25, 17405), (27, 17408), (37, 17519), (40, 17543), (62, 17762), (63, 17774), (64, 17792), (78, 17924), (93, 18101), (102, 18218),

Gene: Raphaella_27 Start: 19401, Stop: 20348, Start Num: 16

Candidate Starts for Raphaella_27:

(Start: 16 @19401 has 10 MA's), (29, 19488), (52, 19680), (56, 19716), (60, 19734), (65, 19806), (78, 19947), (83, 19983), (87, 20049), (88, 20061), (89, 20070), (92, 20112), (96, 20151), (102, 20247),

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

Candidate Starts for Raqqa_24:

(4, 18428), (Start: 16 @18653 has 10 MA's), (21, 18701), (25, 18716), (27, 18719), (29, 18746), (63, 19085), (74, 19196), (78, 19238), (101, 19538), (104, 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 10 MA's), (21, 17055), (29, 17100), (78, 17592), (86, 17670), (94, 17772), (99, 17868), (102, 17886),

Gene: Ryan_25 Start: 19219, Stop: 20163, Start Num: 23

Candidate Starts for Ryan_25:

(Start: 23 @19219 has 10 MA's), (25, 19228), (33, 19294), (34, 19303), (35, 19333), (36, 19339), (44, 19435), (49, 19465), (52, 19492), (53, 19504), (57, 19537), (76, 19750), (78, 19768), (88, 19879), (99, 20044), (100, 20047),

Gene: Sakai_27 Start: 19410, Stop: 20357, Start Num: 16

Candidate Starts for Sakai_27:

(Start: 16 @19410 has 10 MA's), (29, 19497), (52, 19689), (56, 19725), (60, 19743), (65, 19815), (78, 19956), (83, 19992), (87, 20058), (88, 20070), (89, 20079), (92, 20121), (96, 20160), (102, 20256),

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

Candidate Starts for Seahorse_28:

(Start: 16 @19765 has 10 MA's), (21, 19813), (27, 19831), (29, 19858), (31, 19870), (32, 19876), (63, 20197), (69, 20257), (74, 20308), (78, 20350), (101, 20650),

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

Candidate Starts for Tiff81_29:

(Start: 16 @19493 has 10 MA's), (21, 19541), (25, 19556), (27, 19559), (29, 19586), (31, 19598), (32, 19604), (42, 19715), (63, 19925), (74, 20036), (78, 20078), (101, 20378),

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

Candidate Starts for TripleJ_24:

(Start: 16 @18283 has 10 MA's), (31, 18391), (36, 18451), (43, 18532), (45, 18544), (55, 18631), (58, 18646), (63, 18709), (68, 18745), (78, 18883), (80, 18895), (90, 19015), (99, 19159), (100, 19162),

Gene: Vibaki_27 Start: 25425, Stop: 26384, Start Num: 23

Candidate Starts for Vibaki_27:

(14, 25350), (Start: 23 @25425 has 10 MA's), (25, 25434), (35, 25533), (48, 25656), (52, 25692), (60, 25749), (66, 25827), (78, 25986), (85, 26058), (95, 26172), (101, 26277),

Gene: Zaheer_25 Start: 19308, Stop: 20252, Start Num: 23

Candidate Starts for Zaheer_25:

(Start: 23 @19308 has 10 MA's), (25, 19317), (33, 19383), (34, 19392), (35, 19422), (36, 19428), (44, 19524), (49, 19554), (52, 19581), (53, 19593), (57, 19626), (76, 19839), (78, 19857), (88, 19968), (99, 20133), (100, 20136),

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

Candidate Starts for Zucker_24:

(Start: 16 @18385 has 10 MA's), (21, 18433), (31, 18490), (32, 18496), (40, 18586), (42, 18607), (51, 18679), (56, 18739), (61, 18772), (74, 18928), (78, 18970), (101, 19270), (104, 19306),