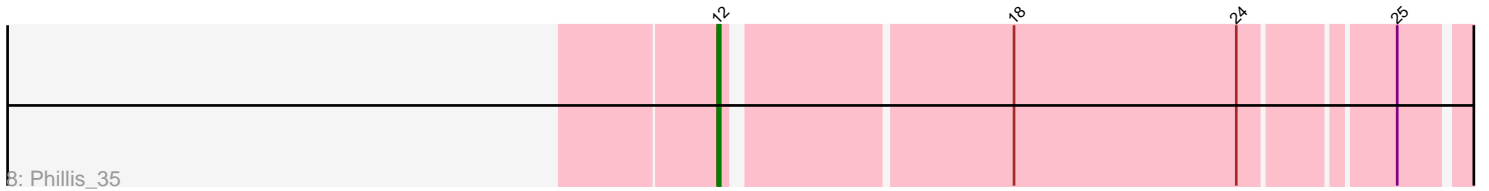
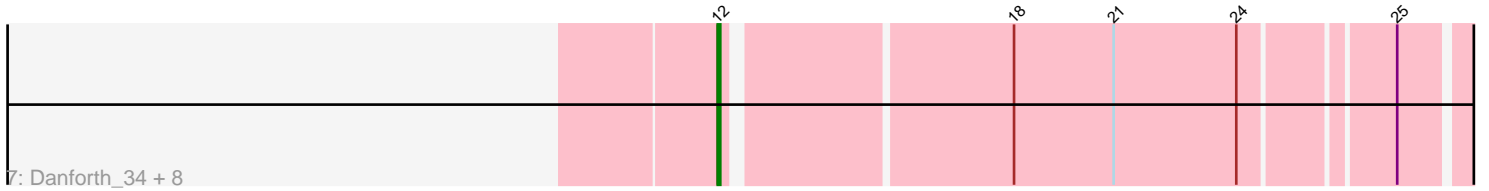
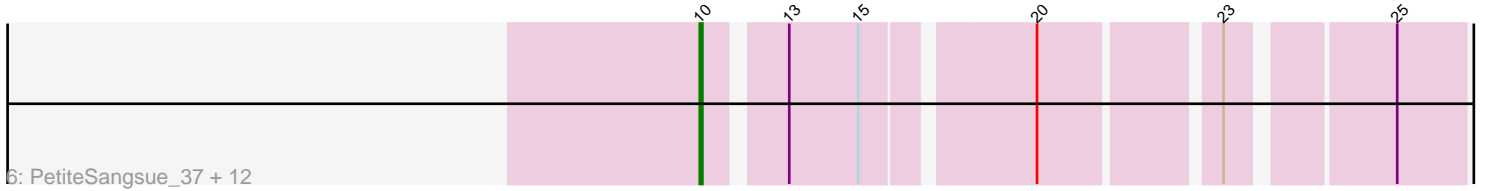
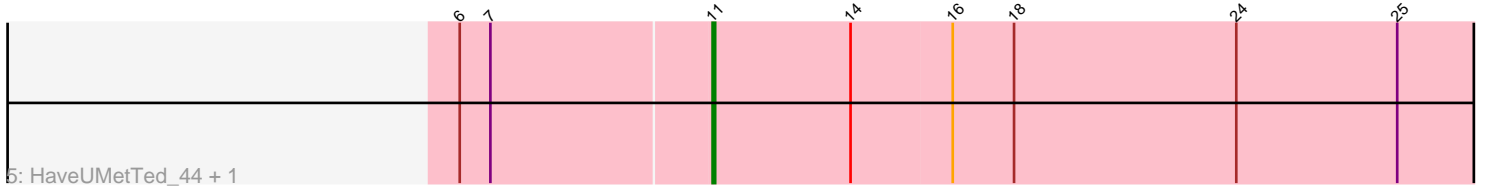
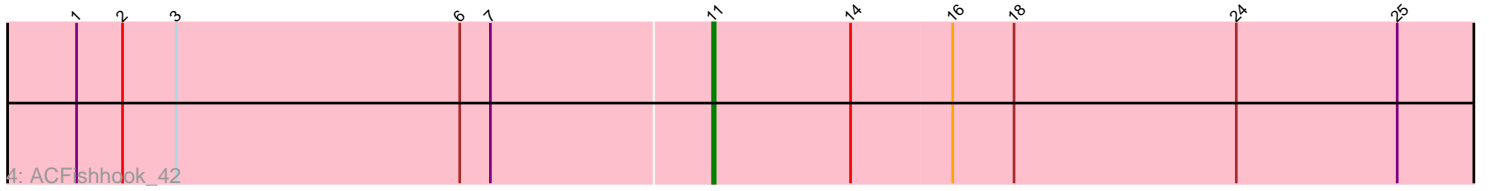
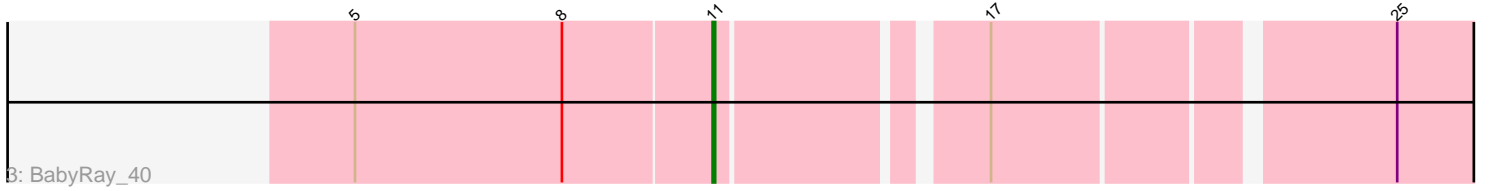
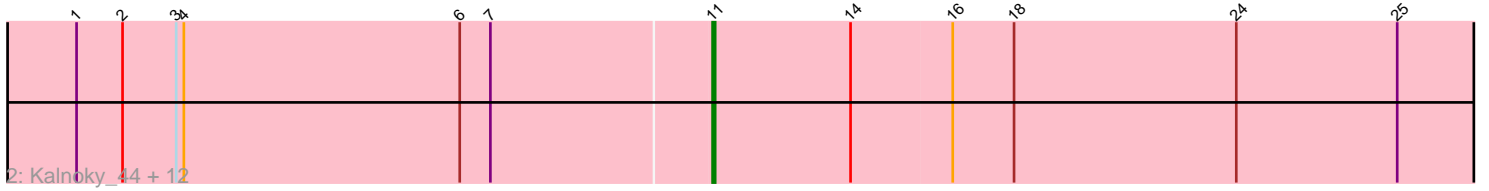
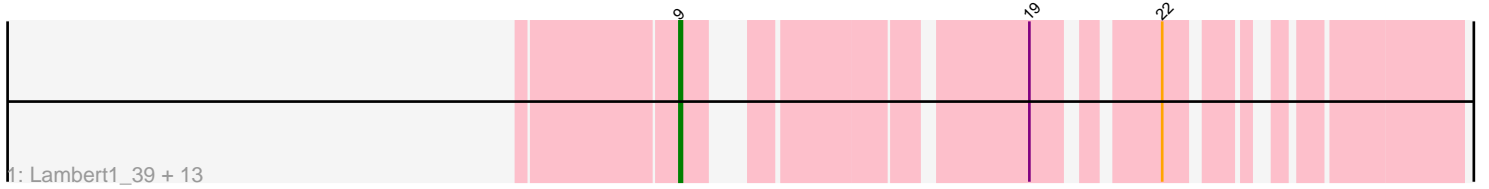


Pham 163650



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 163650 Report

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

Pham number 163650 has 54 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Lambert1_39, Noella_39, Todacoro_39, Popcicle_39, Norbert_38, QuinnKiro_38, Panamaxus_37, Texage_38, Margo_39, ResDef_40, Caviar_39, Hookmount_39, Pocahontas_39, Veracruz_38
- Track 2 : Kalnoky_44, Groupthink_44, Kalb97_44, JeppNRM_44, PurpleHaze_43, Pawn_43, PhishRPhriends_41, Reba_43, Manu_43, Phranny_44, Gemma_42, Heliosoles_42, Marius_44
- Track 3 : BabyRay_40
- Track 4 : ACFishhook_42
- Track 5 : HaveUMetTed_44, OlanP_42
- Track 6 : PetiteSangsue_37, Katalie136_37, Badger_36, Wile_37, Bumblebee11_36, Perplexer_37, AbbysRanger_37, Morpher26_37, Cici_37, Backyardigan_36, Xena_36, Achebe_36, Datway_37
- Track 7 : Danforth_34, NearlyHeadless_35, Groundhog_34, Dixon_35, Astro_35, Roary_35, Stephig9_35, Smeadley_35, Expelliarmus_34
- Track 8 : Phillis_35

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

The start number called the most often in the published annotations is 11, it was called in 16 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook_42, BabyRay_40, Gemma_42, Groupthink_44, HaveUMetTed_44, Heliosoles_42, JeppNRM_44, Kalb97_44, Kalnoky_44, Manu_43, Marius_44, OlanP_42, Pawn_43, PhishRPhriends_41, Phranny_44, PurpleHaze_43, Reba_43,

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

-

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

- AbbysRanger_37, Achebe_36, Astro_35, Backyardigan_36, Badger_36, Bumblebee11_36, Caviar_39, Cici_37, Danforth_34, Datway_37, Dixon_35, Expelliarmus_34, Groundhog_34, Hookmount_39, Katalie136_37, Lambert1_39, Margo_39, Morpher26_37, NearlyHeadless_35, Noella_39, Norbert_38,

Panamaxus_37, Perplexer_37, PetiteSangsue_37, Phillis_35, Pocahontas_39, Popcicle_39, QuinnKiro_38, ResDef_40, Roary_35, Smeadley_35, Stephig9_35, Texage_38, Todacoro_39, Veracruz_38, Wile_37, Xena_36,

Summary by start number:

Start 9:

- Found in 14 of 54 (25.9%) of genes in pham
- Manual Annotations of this start: 13 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caviar_39 (A3), Hookmount_39 (A3), Lambert1_39 (A3), Margo_39 (A3), Noella_39 (A3), Norbert_38 (A3), Panamaxus_37 (A3), Pocahontas_39 (A3), Popcicle_39 (A3), QuinnKiro_38 (A3), ResDef_40 (A3), Texage_38 (A3), Todacoro_39 (A3), Veracruz_38 (A3),

Start 10:

- Found in 13 of 54 (24.1%) of genes in pham
- Manual Annotations of this start: 13 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger_37 (A4), Achebe_36 (A4), Backyardigan_36 (A4), Badger_36 (A4), Bumblebee11_36 (A4), Cici_37 (A4), Datway_37 (A4), Katalie136_37 (A4), Morpher26_37 (A4), Perplexer_37 (A4), PetiteSangsue_37 (A4), Wile_37 (A4), Xena_36 (A4),

Start 11:

- Found in 17 of 54 (31.5%) of genes in pham
- Manual Annotations of this start: 16 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ACFishhook_42 (A3), BabyRay_40 (A3), Gemma_42 (A3), Groupthink_44 (A3), HaveUMetTed_44 (A3), Heliosoles_42 (A3), JeppNRM_44 (A3), Kalb97_44 (A3), Kalnoky_44 (A3), Manu_43 (A3), Marius_44 (A3), OlanP_42 (A3), Pawn_43 (A3), PhishRPhriends_41 (A3), Phranny_44 (A3), PurpleHaze_43 (A3), Reba_43 (A3),

Start 12:

- Found in 10 of 54 (18.5%) of genes in pham
- Manual Annotations of this start: 10 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_35 (A8), Danforth_34 (A8), Dixon_35 (A8), Expelliarmus_34 (A8), Groundhog_34 (A8), NearlyHeadless_35 (A8), Phillis_35 (A8), Roary_35 (A8), Smeadley_35 (A8), Stephig9_35 (A8),

Summary by clusters:

There are 3 clusters represented in this pham: A8, A3, A4,

Info for manual annotations of cluster A3:

- Start number 9 was manually annotated 13 times for cluster A3.
- Start number 11 was manually annotated 16 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 10 was manually annotated 13 times for cluster A4.

Info for manual annotations of cluster A8:

•Start number 12 was manually annotated 10 times for cluster A8.

Gene Information:

Gene: ACFishhook_42 Start: 29061, Stop: 28756, Start Num: 11

Candidate Starts for ACFishhook_42:

(1, 29307), (2, 29289), (3, 29268), (6, 29157), (7, 29145), (Start: 11 @29061 has 16 MA's), (14, 29007), (16, 28968), (18, 28944), (24, 28857), (25, 28794),

Gene: AbbysRanger_37 Start: 28220, Stop: 27960, Start Num: 10

Candidate Starts for AbbysRanger_37:

(Start: 10 @28220 has 13 MA's), (13, 28193), (15, 28166), (20, 28106), (23, 28043), (25, 27986),

Gene: Achebe_36 Start: 28203, Stop: 27943, Start Num: 10

Candidate Starts for Achebe_36:

(Start: 10 @28203 has 13 MA's), (13, 28176), (15, 28149), (20, 28089), (23, 28026), (25, 27969),

Gene: Astro_35 Start: 26960, Stop: 26682, Start Num: 12

Candidate Starts for Astro_35:

(Start: 12 @26960 has 10 MA's), (18, 26855), (21, 26816), (24, 26768), (25, 26714),

Gene: BabyRay_40 Start: 28714, Stop: 28439, Start Num: 11

Candidate Starts for BabyRay_40:

(5, 28852), (8, 28771), (Start: 11 @28714 has 16 MA's), (17, 28621), (25, 28477),

Gene: Backyardigan_36 Start: 28236, Stop: 27976, Start Num: 10

Candidate Starts for Backyardigan_36:

(Start: 10 @28236 has 13 MA's), (13, 28209), (15, 28182), (20, 28122), (23, 28059), (25, 28002),

Gene: Badger_36 Start: 28204, Stop: 27944, Start Num: 10

Candidate Starts for Badger_36:

(Start: 10 @28204 has 13 MA's), (13, 28177), (15, 28150), (20, 28090), (23, 28027), (25, 27970),

Gene: Bumblebee11_36 Start: 28206, Stop: 27946, Start Num: 10

Candidate Starts for Bumblebee11_36:

(Start: 10 @28206 has 13 MA's), (13, 28179), (15, 28152), (20, 28092), (23, 28029), (25, 27972),

Gene: Caviar_39 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Caviar_39:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Cici_37 Start: 28221, Stop: 27961, Start Num: 10

Candidate Starts for Cici_37:

(Start: 10 @28221 has 13 MA's), (13, 28194), (15, 28167), (20, 28107), (23, 28044), (25, 27987),

Gene: Danforth_34 Start: 26845, Stop: 26567, Start Num: 12

Candidate Starts for Danforth_34:

(Start: 12 @26845 has 10 MA's), (18, 26740), (21, 26701), (24, 26653), (25, 26599),

Gene: Datway_37 Start: 28192, Stop: 27932, Start Num: 10

Candidate Starts for Datway_37:

(Start: 10 @28192 has 13 MA's), (13, 28165), (15, 28138), (20, 28078), (23, 28015), (25, 27958),

Gene: Dixon_35 Start: 26954, Stop: 26676, Start Num: 12

Candidate Starts for Dixon_35:

(Start: 12 @26954 has 10 MA's), (18, 26849), (21, 26810), (24, 26762), (25, 26708),

Gene: Expelliarmus_34 Start: 26831, Stop: 26553, Start Num: 12

Candidate Starts for Expelliarmus_34:

(Start: 12 @26831 has 10 MA's), (18, 26726), (21, 26687), (24, 26639), (25, 26585),

Gene: Gemma_42 Start: 28985, Stop: 28680, Start Num: 11

Candidate Starts for Gemma_42:

(1, 29231), (2, 29213), (3, 29192), (4, 29189), (6, 29081), (7, 29069), (Start: 11 @28985 has 16 MA's), (14, 28931), (16, 28892), (18, 28868), (24, 28781), (25, 28718),

Gene: Groundhog_34 Start: 26925, Stop: 26647, Start Num: 12

Candidate Starts for Groundhog_34:

(Start: 12 @26925 has 10 MA's), (18, 26820), (21, 26781), (24, 26733), (25, 26679),

Gene: Groupthink_44 Start: 28989, Stop: 28684, Start Num: 11

Candidate Starts for Groupthink_44:

(1, 29235), (2, 29217), (3, 29196), (4, 29193), (6, 29085), (7, 29073), (Start: 11 @28989 has 16 MA's), (14, 28935), (16, 28896), (18, 28872), (24, 28785), (25, 28722),

Gene: HaveUMetTed_44 Start: 28983, Stop: 28678, Start Num: 11

Candidate Starts for HaveUMetTed_44:

(6, 29079), (7, 29067), (Start: 11 @28983 has 16 MA's), (14, 28929), (16, 28890), (18, 28866), (24, 28779), (25, 28716),

Gene: Heliosoles_42 Start: 28992, Stop: 28687, Start Num: 11

Candidate Starts for Heliosoles_42:

(1, 29238), (2, 29220), (3, 29199), (4, 29196), (6, 29088), (7, 29076), (Start: 11 @28992 has 16 MA's), (14, 28938), (16, 28899), (18, 28875), (24, 28788), (25, 28725),

Gene: Hookmount_39 Start: 28760, Stop: 28521, Start Num: 9

Candidate Starts for Hookmount_39:

(Start: 9 @28760 has 13 MA's), (19, 28652), (22, 28613),

Gene: JeppNRM_44 Start: 28990, Stop: 28685, Start Num: 11

Candidate Starts for JeppNRM_44:

(1, 29236), (2, 29218), (3, 29197), (4, 29194), (6, 29086), (7, 29074), (Start: 11 @28990 has 16 MA's), (14, 28936), (16, 28897), (18, 28873), (24, 28786), (25, 28723),

Gene: Kalb97_44 Start: 28988, Stop: 28683, Start Num: 11

Candidate Starts for Kalb97_44:

(1, 29234), (2, 29216), (3, 29195), (4, 29192), (6, 29084), (7, 29072), (Start: 11 @28988 has 16 MA's), (14, 28934), (16, 28895), (18, 28871), (24, 28784), (25, 28721),

Gene: Kalnoky_44 Start: 28986, Stop: 28681, Start Num: 11

Candidate Starts for Kalnoky_44:

(1, 29232), (2, 29214), (3, 29193), (4, 29190), (6, 29082), (7, 29070), (Start: 11 @28986 has 16 MA's), (14, 28932), (16, 28893), (18, 28869), (24, 28782), (25, 28719),

Gene: Katalie136_37 Start: 28206, Stop: 27946, Start Num: 10

Candidate Starts for Katalie136_37:

(Start: 10 @28206 has 13 MA's), (13, 28179), (15, 28152), (20, 28092), (23, 28029), (25, 27972),

Gene: Lambert1_39 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Lambert1_39:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Manu_43 Start: 28989, Stop: 28684, Start Num: 11

Candidate Starts for Manu_43:

(1, 29235), (2, 29217), (3, 29196), (4, 29193), (6, 29085), (7, 29073), (Start: 11 @28989 has 16 MA's), (14, 28935), (16, 28896), (18, 28872), (24, 28785), (25, 28722),

Gene: Margo_39 Start: 28785, Stop: 28546, Start Num: 9

Candidate Starts for Margo_39:

(Start: 9 @28785 has 13 MA's), (19, 28677), (22, 28638),

Gene: Marius_44 Start: 28986, Stop: 28681, Start Num: 11

Candidate Starts for Marius_44:

(1, 29232), (2, 29214), (3, 29193), (4, 29190), (6, 29082), (7, 29070), (Start: 11 @28986 has 16 MA's), (14, 28932), (16, 28893), (18, 28869), (24, 28782), (25, 28719),

Gene: Morpher26_37 Start: 28227, Stop: 27967, Start Num: 10

Candidate Starts for Morpher26_37:

(Start: 10 @28227 has 13 MA's), (13, 28200), (15, 28173), (20, 28113), (23, 28050), (25, 27993),

Gene: NearlyHeadless_35 Start: 26884, Stop: 26606, Start Num: 12

Candidate Starts for NearlyHeadless_35:

(Start: 12 @26884 has 10 MA's), (18, 26779), (21, 26740), (24, 26692), (25, 26638),

Gene: Noella_39 Start: 28760, Stop: 28521, Start Num: 9

Candidate Starts for Noella_39:

(Start: 9 @28760 has 13 MA's), (19, 28652), (22, 28613),

Gene: Norbert_38 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Norbert_38:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: OlanP_42 Start: 29171, Stop: 28866, Start Num: 11

Candidate Starts for OlanP_42:

(6, 29267), (7, 29255), (Start: 11 @29171 has 16 MA's), (14, 29117), (16, 29078), (18, 29054), (24, 28967), (25, 28904),

Gene: Panamaxus_37 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Panamaxus_37:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Pawn_43 Start: 28993, Stop: 28688, Start Num: 11

Candidate Starts for Pawn_43:

(1, 29239), (2, 29221), (3, 29200), (4, 29197), (6, 29089), (7, 29077), (Start: 11 @28993 has 16 MA's), (14, 28939), (16, 28900), (18, 28876), (24, 28789), (25, 28726),

Gene: Perplexer_37 Start: 28203, Stop: 27943, Start Num: 10
Candidate Starts for Perplexer_37:
(Start: 10 @28203 has 13 MA's), (13, 28176), (15, 28149), (20, 28089), (23, 28026), (25, 27969),

Gene: PetiteSangusue_37 Start: 28206, Stop: 27946, Start Num: 10
Candidate Starts for PetiteSangusue_37:
(Start: 10 @28206 has 13 MA's), (13, 28179), (15, 28152), (20, 28092), (23, 28029), (25, 27972),

Gene: Phillis_35 Start: 26910, Stop: 26632, Start Num: 12
Candidate Starts for Phillis_35:
(Start: 12 @26910 has 10 MA's), (18, 26805), (24, 26718), (25, 26664),

Gene: PhishRPhriends_41 Start: 28167, Stop: 27862, Start Num: 11
Candidate Starts for PhishRPhriends_41:
(1, 28413), (2, 28395), (3, 28374), (4, 28371), (6, 28263), (7, 28251), (Start: 11 @28167 has 16 MA's),
(14, 28113), (16, 28074), (18, 28050), (24, 27963), (25, 27900),

Gene: Phranny_44 Start: 28975, Stop: 28670, Start Num: 11
Candidate Starts for Phranny_44:
(1, 29221), (2, 29203), (3, 29182), (4, 29179), (6, 29071), (7, 29059), (Start: 11 @28975 has 16 MA's),
(14, 28921), (16, 28882), (18, 28858), (24, 28771), (25, 28708),

Gene: Pocahontas_39 Start: 28756, Stop: 28517, Start Num: 9
Candidate Starts for Pocahontas_39:
(Start: 9 @28756 has 13 MA's), (19, 28648), (22, 28609),

Gene: Popcicle_39 Start: 28756, Stop: 28517, Start Num: 9
Candidate Starts for Popcicle_39:
(Start: 9 @28756 has 13 MA's), (19, 28648), (22, 28609),

Gene: PurpleHaze_43 Start: 28988, Stop: 28683, Start Num: 11
Candidate Starts for PurpleHaze_43:
(1, 29234), (2, 29216), (3, 29195), (4, 29192), (6, 29084), (7, 29072), (Start: 11 @28988 has 16 MA's),
(14, 28934), (16, 28895), (18, 28871), (24, 28784), (25, 28721),

Gene: QuinnKiro_38 Start: 28759, Stop: 28520, Start Num: 9
Candidate Starts for QuinnKiro_38:
(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Reba_43 Start: 28648, Stop: 28343, Start Num: 11
Candidate Starts for Reba_43:
(1, 28894), (2, 28876), (3, 28855), (4, 28852), (6, 28744), (7, 28732), (Start: 11 @28648 has 16 MA's),
(14, 28594), (16, 28555), (18, 28531), (24, 28444), (25, 28381),

Gene: ResDef_40 Start: 28759, Stop: 28520, Start Num: 9
Candidate Starts for ResDef_40:
(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Roary_35 Start: 26830, Stop: 26552, Start Num: 12
Candidate Starts for Roary_35:
(Start: 12 @26830 has 10 MA's), (18, 26725), (21, 26686), (24, 26638), (25, 26584),

Gene: Smeadley_35 Start: 26953, Stop: 26675, Start Num: 12

Candidate Starts for Smeadley_35:

(Start: 12 @26953 has 10 MA's), (18, 26848), (21, 26809), (24, 26761), (25, 26707),

Gene: Stephig9_35 Start: 26858, Stop: 26580, Start Num: 12

Candidate Starts for Stephig9_35:

(Start: 12 @26858 has 10 MA's), (18, 26753), (21, 26714), (24, 26666), (25, 26612),

Gene: Texage_38 Start: 28760, Stop: 28521, Start Num: 9

Candidate Starts for Texage_38:

(Start: 9 @28760 has 13 MA's), (19, 28652), (22, 28613),

Gene: Todacoro_39 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Todacoro_39:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Veracruz_38 Start: 28759, Stop: 28520, Start Num: 9

Candidate Starts for Veracruz_38:

(Start: 9 @28759 has 13 MA's), (19, 28651), (22, 28612),

Gene: Wile_37 Start: 28237, Stop: 27977, Start Num: 10

Candidate Starts for Wile_37:

(Start: 10 @28237 has 13 MA's), (13, 28210), (15, 28183), (20, 28123), (23, 28060), (25, 28003),

Gene: Xena_36 Start: 28203, Stop: 27943, Start Num: 10

Candidate Starts for Xena_36:

(Start: 10 @28203 has 13 MA's), (13, 28176), (15, 28149), (20, 28089), (23, 28026), (25, 27969),