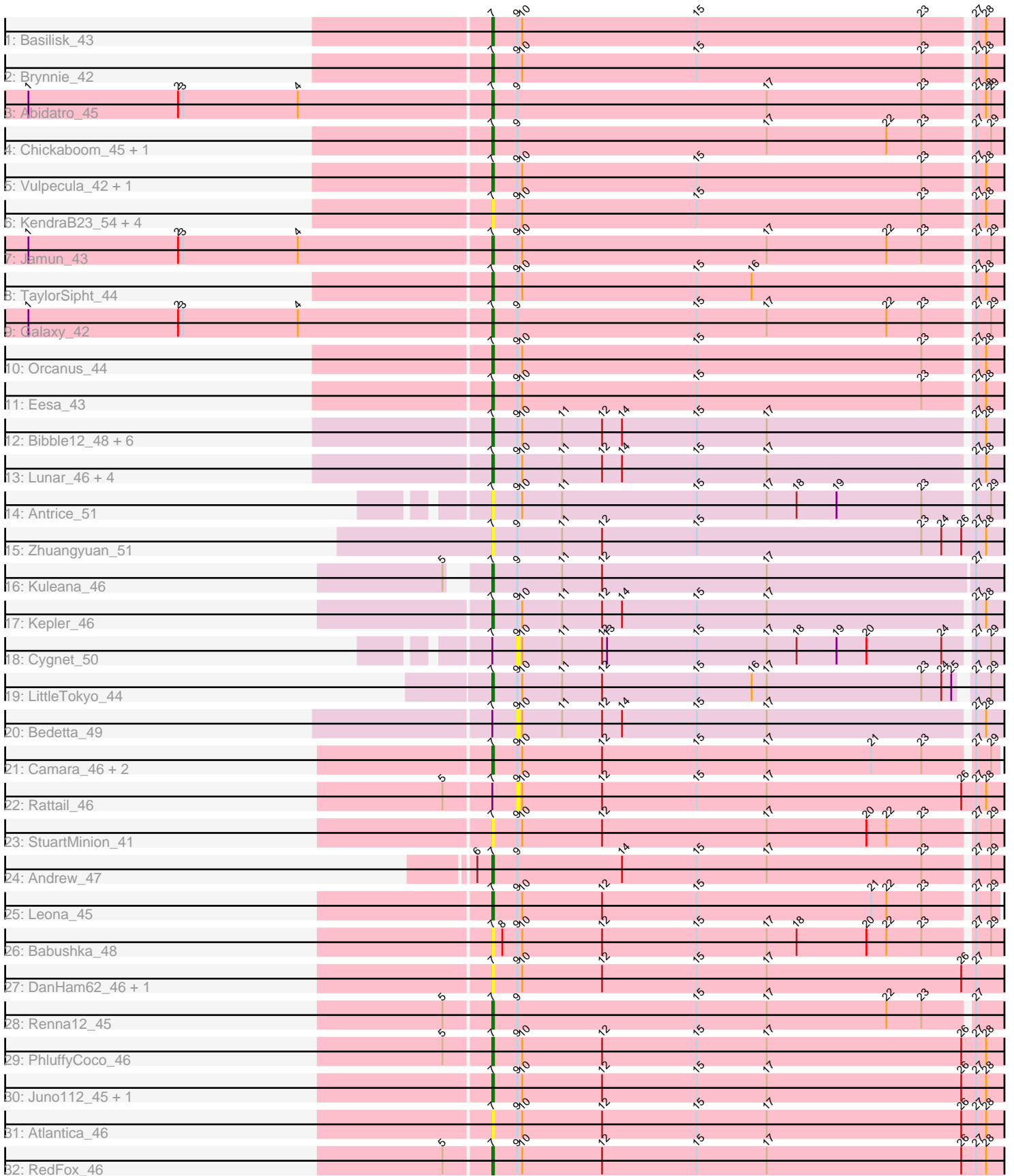


Zoomed Pham 221504



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 221504 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221504 has 52 members, 23 are drafts.

Phages represented in each track:

- Track 1 : Basilisk_43
- Track 2 : Brynnie_42
- Track 3 : Abidatro_45
- Track 4 : Chickaboom_45, WileyE_49
- Track 5 : Vulpecula_42, Ruchi_42
- Track 6 : KendraB23_54, Toad24_46, Gravel_53, Westrich_52, Pelletreau_53
- Track 7 : Jamun_43
- Track 8 : TaylorSipht_44
- Track 9 : Galaxy_42
- Track 10 : Orcanus_44
- Track 11 : Eesa_43
- Track 12 : Bible12_48, Colusalem_47, Jerole_54, Amelia_44, OtsoOtso_52, HannahPhantana_45, Polka_44
- Track 13 : Lunar_46, Daob_46, Coral_44, Cote_46, Melons_46
- Track 14 : Antrice_51
- Track 15 : Zhuangyuan_51
- Track 16 : Kuleana_46
- Track 17 : Kepler_46
- Track 18 : Cygnet_50
- Track 19 : LittleTokyo_44
- Track 20 : Bedetta_49
- Track 21 : Camara_46, Glotell_48, KHumphrey_46
- Track 22 : Rattail_46
- Track 23 : StuartMinion_41
- Track 24 : Andrew_47
- Track 25 : Leona_45
- Track 26 : Babushka_48
- Track 27 : DanHam62_46, AmiCi24_45
- Track 28 : Renna12_45
- Track 29 : PhluffyCoco_46
- Track 30 : Juno112_45, HamCheese_45
- Track 31 : Atlantica_46
- Track 32 : RedFox_46

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

The start number called the most often in the published annotations is 7, it was called in 29 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_45, Amelia_44, AmiCi24_45, Andrew_47, Antrice_51, Atlantica_46, Babushka_48, Basilisk_43, Bibble12_48, Brynnie_42, Camara_46, Chickaboom_45, Colusalem_47, Coral_44, Cote_46, DanHam62_46, Daob_46, Eesa_43, Galaxy_42, Glotell_48, Gravel_53, HamCheese_45, HannahPhantana_45, Jamun_43, Jerole_54, Juno112_45, KHumphrey_46, KendraB23_54, Kepler_46, Kuleana_46, Leona_45, LittleTokyo_44, Lunar_46, Melons_46, Orcanus_44, OtsoOtso_52, Pelletreau_53, PhluffyCoco_46, Polka_44, RedFox_46, Renna12_45, Ruchi_42, StuartMinion_41, TaylorSipht_44, Toad24_46, Vulpecula_42, Westrich_52, WileyE_49, Zhuangyuan_51,

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

- Bedetta_49, Cygnet_50, Rattail_46,

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

-

Summary by start number:

Start 7:

- Found in 52 of 52 (100.0%) of genes in pham
- Manual Annotations of this start: 29 of 29
- Called 94.2% of time when present
- Phage (with cluster) where this start called: Abidatro_45 (AS1), Amelia_44 (AS2), AmiCi24_45 (AS3), Andrew_47 (AS3), Antrice_51 (AS2), Atlantica_46 (AS3), Babushka_48 (AS3), Basilisk_43 (AS1), Bibble12_48 (AS2), Brynnie_42 (AS1), Camara_46 (AS3), Chickaboom_45 (AS1), Colusalem_47 (AS2), Coral_44 (AS2), Cote_46 (AS2), DanHam62_46 (AS3), Daob_46 (AS2), Eesa_43 (AS1), Galaxy_42 (AS1), Glotell_48 (AS3), Gravel_53 (AS1), HamCheese_45 (AS3), HannahPhantana_45 (AS2), Jamun_43 (AS1), Jerole_54 (AS2), Juno112_45 (AS3), KHumphrey_46 (AS3), KendraB23_54 (AS1), Kepler_46 (AS2), Kuleana_46 (AS2), Leona_45 (AS3), LittleTokyo_44 (AS2), Lunar_46 (AS2), Melons_46 (AS2), Orcanus_44 (AS1), OtsoOtso_52 (AS2), Pelletreau_53 (AS1), PhluffyCoco_46 (AS3), Polka_44 (AS2), RedFox_46 (AS3), Renna12_45 (AS3), Ruchi_42 (AS1), StuartMinion_41 (AS3), TaylorSipht_44 (AS1), Toad24_46 (AS1), Vulpecula_42 (AS1), Westrich_52 (AS1), WileyE_49 (AS1), Zhuangyuan_51 (AS2),

Start 9:

- Found in 52 of 52 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 5.8% of time when present
- Phage (with cluster) where this start called: Bedetta_49 (AS2), Cygnet_50 (AS2), Rattail_46 (AS3),

Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

•Start number 7 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

•Start number 7 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

•Start number 7 was manually annotated 7 times for cluster AS3.

Gene Information:

Gene: Abidatro_45 Start: 29469, Stop: 30263, Start Num: 7

Candidate Starts for Abidatro_45:

(1, 29193), (2, 29283), (3, 29286), (4, 29355), (Start: 7 @29469 has 29 MA's), (9, 29484), (17, 29634), (23, 29727), (27, 29754), (28, 29760), (29, 29763), (31, 29784), (37, 29850), (38, 29856), (41, 29889), (43, 29913), (44, 29973), (46, 30192),

Gene: Amelia_44 Start: 27749, Stop: 28534, Start Num: 7

Candidate Starts for Amelia_44:

(Start: 7 @27749 has 29 MA's), (9, 27764), (10, 27767), (11, 27791), (12, 27815), (14, 27827), (15, 27872), (17, 27914), (27, 28034), (28, 28040), (31, 28064), (40, 28139), (41, 28169), (43, 28193), (46, 28475),

Gene: AmiCi24_45 Start: 28806, Stop: 29585, Start Num: 7

Candidate Starts for AmiCi24_45:

(Start: 7 @28806 has 29 MA's), (9, 28821), (10, 28824), (12, 28872), (15, 28929), (17, 28971), (26, 29088), (27, 29097), (30, 29115), (31, 29127), (40, 29202), (41, 29232), (43, 29256), (46, 29523),

Gene: Andrew_47 Start: 28685, Stop: 29464, Start Num: 7

Candidate Starts for Andrew_47:

(6, 28676), (Start: 7 @28685 has 29 MA's), (9, 28700), (14, 28763), (15, 28808), (17, 28850), (23, 28943), (27, 28970), (29, 28979), (31, 29000), (37, 29066), (38, 29072), (41, 29105), (42, 29117), (46, 29405),

Gene: Antrice_51 Start: 28916, Stop: 29704, Start Num: 7

Candidate Starts for Antrice_51:

(Start: 7 @28916 has 29 MA's), (9, 28931), (10, 28934), (11, 28958), (15, 29039), (17, 29081), (18, 29099), (19, 29123), (23, 29174), (27, 29201), (29, 29210), (33, 29258), (36, 29273), (39, 29303), (41, 29333), (46, 29624),

Gene: Atlantica_46 Start: 28808, Stop: 29587, Start Num: 7

Candidate Starts for Atlantica_46:

(Start: 7 @28808 has 29 MA's), (9, 28823), (10, 28826), (12, 28874), (15, 28931), (17, 28973), (26, 29090), (27, 29099), (28, 29105), (30, 29117), (31, 29129), (40, 29204), (41, 29234), (43, 29258), (46, 29525),

Gene: Babushka_48 Start: 28633, Stop: 29409, Start Num: 7

Candidate Starts for Babushka_48:

(Start: 7 @28633 has 29 MA's), (8, 28639), (9, 28648), (10, 28651), (12, 28699), (15, 28756), (17, 28798), (18, 28816), (20, 28858), (22, 28870), (23, 28891), (27, 28918), (29, 28927), (36, 28990), (39, 29020), (41, 29050), (46, 29350),

Gene: Basilisk_43 Start: 28639, Stop: 29460, Start Num: 7

Candidate Starts for Basilisk_43:

(Start: 7 @28639 has 29 MA's), (9, 28654), (10, 28657), (15, 28762), (23, 28897), (27, 28924), (28, 28930), (31, 28954), (40, 29029), (41, 29059), (43, 29083), (45, 29293), (50, 29398), (52, 29407), (54, 29416),

Gene: Bedetta_49 Start: 27911, Stop: 28705, Start Num: 9

Candidate Starts for Bedetta_49:

(Start: 7 @27896 has 29 MA's), (9, 27911), (10, 27914), (11, 27938), (12, 27962), (14, 27974), (15, 28019), (17, 28061), (27, 28181), (28, 28187), (31, 28211), (40, 28286), (41, 28316), (43, 28340), (46, 28622), (49, 28658),

Gene: Bible12_48 Start: 27744, Stop: 28529, Start Num: 7

Candidate Starts for Bible12_48:

(Start: 7 @27744 has 29 MA's), (9, 27759), (10, 27762), (11, 27786), (12, 27810), (14, 27822), (15, 27867), (17, 27909), (27, 28029), (28, 28035), (31, 28059), (40, 28134), (41, 28164), (43, 28188), (46, 28470),

Gene: Brynnie_42 Start: 28517, Stop: 29317, Start Num: 7

Candidate Starts for Brynnie_42:

(Start: 7 @28517 has 29 MA's), (9, 28532), (10, 28535), (15, 28640), (23, 28775), (27, 28802), (28, 28808), (31, 28832), (40, 28907), (41, 28937), (43, 28961), (45, 29171), (48, 29237), (51, 29267), (55, 29288),

Gene: Camara_46 Start: 28708, Stop: 29478, Start Num: 7

Candidate Starts for Camara_46:

(Start: 7 @28708 has 29 MA's), (9, 28723), (10, 28726), (12, 28774), (15, 28831), (17, 28873), (21, 28936), (23, 28966), (27, 28993), (29, 29002), (32, 29032), (37, 29077), (38, 29083), (41, 29116), (46, 29416),

Gene: Chickaboom_45 Start: 29238, Stop: 30044, Start Num: 7

Candidate Starts for Chickaboom_45:

(Start: 7 @29238 has 29 MA's), (9, 29253), (17, 29403), (22, 29475), (23, 29496), (27, 29523), (29, 29532), (31, 29553), (35, 29592), (37, 29619), (38, 29625), (41, 29658), (43, 29682), (44, 29742), (48, 29967), (49, 29997),

Gene: Colusalem_47 Start: 27726, Stop: 28511, Start Num: 7

Candidate Starts for Colusalem_47:

(Start: 7 @27726 has 29 MA's), (9, 27741), (10, 27744), (11, 27768), (12, 27792), (14, 27804), (15, 27849), (17, 27891), (27, 28011), (28, 28017), (31, 28041), (40, 28116), (41, 28146), (43, 28170), (46, 28452),

Gene: Coral_44 Start: 27597, Stop: 28406, Start Num: 7

Candidate Starts for Coral_44:

(Start: 7 @27597 has 29 MA's), (9, 27612), (10, 27615), (11, 27639), (12, 27663), (14, 27675), (15, 27720), (17, 27762), (27, 27882), (28, 27888), (31, 27912), (40, 27987), (41, 28017), (43, 28041), (46, 28323), (49, 28359),

Gene: Cote_46 Start: 28074, Stop: 28883, Start Num: 7

Candidate Starts for Cote_46:

(Start: 7 @28074 has 29 MA's), (9, 28089), (10, 28092), (11, 28116), (12, 28140), (14, 28152), (15, 28197), (17, 28239), (27, 28359), (28, 28365), (31, 28389), (40, 28464), (41, 28494), (43, 28518), (46, 28800), (49, 28836),

Gene: Cygnet_50 Start: 29541, Stop: 30314, Start Num: 9

Candidate Starts for Cygnet_50:

(Start: 7 @29526 has 29 MA's), (9, 29541), (10, 29544), (11, 29568), (12, 29592), (13, 29595), (15, 29649), (17, 29691), (18, 29709), (19, 29733), (20, 29751), (24, 29796), (27, 29811), (29, 29820), (33, 29868), (36, 29883), (39, 29913), (41, 29943), (46, 30234),

Gene: DanHam62_46 Start: 28807, Stop: 29586, Start Num: 7

Candidate Starts for DanHam62_46:

(Start: 7 @28807 has 29 MA's), (9, 28822), (10, 28825), (12, 28873), (15, 28930), (17, 28972), (26, 29089), (27, 29098), (30, 29116), (31, 29128), (40, 29203), (41, 29233), (43, 29257), (46, 29524),

Gene: Daob_46 Start: 28082, Stop: 28891, Start Num: 7

Candidate Starts for Daob_46:

(Start: 7 @28082 has 29 MA's), (9, 28097), (10, 28100), (11, 28124), (12, 28148), (14, 28160), (15, 28205), (17, 28247), (27, 28367), (28, 28373), (31, 28397), (40, 28472), (41, 28502), (43, 28526), (46, 28808), (49, 28844),

Gene: Eesa_43 Start: 30117, Stop: 30914, Start Num: 7

Candidate Starts for Eesa_43:

(Start: 7 @30117 has 29 MA's), (9, 30132), (10, 30135), (15, 30240), (23, 30375), (27, 30402), (28, 30408), (31, 30432), (40, 30507), (41, 30537), (43, 30561), (49, 30867),

Gene: Galaxy_42 Start: 27889, Stop: 28683, Start Num: 7

Candidate Starts for Galaxy_42:

(1, 27613), (2, 27703), (3, 27706), (4, 27775), (Start: 7 @27889 has 29 MA's), (9, 27904), (15, 28012), (17, 28054), (22, 28126), (23, 28147), (27, 28174), (29, 28183), (31, 28204), (37, 28270), (38, 28276), (41, 28309), (43, 28333), (44, 28393), (46, 28612),

Gene: Glotell_48 Start: 28864, Stop: 29634, Start Num: 7

Candidate Starts for Glotell_48:

(Start: 7 @28864 has 29 MA's), (9, 28879), (10, 28882), (12, 28930), (15, 28987), (17, 29029), (21, 29092), (23, 29122), (27, 29149), (29, 29158), (32, 29188), (37, 29233), (38, 29239), (41, 29272), (46, 29572),

Gene: Gravel_53 Start: 30207, Stop: 31004, Start Num: 7

Candidate Starts for Gravel_53:

(Start: 7 @30207 has 29 MA's), (9, 30222), (10, 30225), (15, 30330), (23, 30465), (27, 30492), (28, 30498), (30, 30510), (31, 30522), (40, 30597), (41, 30627), (43, 30651), (49, 30957),

Gene: HamCheese_45 Start: 28794, Stop: 29573, Start Num: 7

Candidate Starts for HamCheese_45:

(Start: 7 @28794 has 29 MA's), (9, 28809), (10, 28812), (12, 28860), (15, 28917), (17, 28959), (26, 29076), (27, 29085), (28, 29091), (30, 29103), (31, 29115), (40, 29190), (41, 29220), (42, 29232), (43, 29244), (46, 29511),

Gene: HannahPhantana_45 Start: 27744, Stop: 28529, Start Num: 7

Candidate Starts for HannahPhantana_45:

(Start: 7 @27744 has 29 MA's), (9, 27759), (10, 27762), (11, 27786), (12, 27810), (14, 27822), (15, 27867), (17, 27909), (27, 28029), (28, 28035), (31, 28059), (40, 28134), (41, 28164), (43, 28188), (46, 28470),

Gene: Jamun_43 Start: 29398, Stop: 30198, Start Num: 7

Candidate Starts for Jamun_43:

(1, 29122), (2, 29212), (3, 29215), (4, 29284), (Start: 7 @29398 has 29 MA's), (9, 29413), (10, 29416), (17, 29563), (22, 29635), (23, 29656), (27, 29683), (29, 29692), (31, 29713), (37, 29779), (38, 29785), (41, 29818), (43, 29842), (44, 29902), (48, 30127),

Gene: Jerole_54 Start: 27868, Stop: 28653, Start Num: 7

Candidate Starts for Jerole_54:

(Start: 7 @27868 has 29 MA's), (9, 27883), (10, 27886), (11, 27910), (12, 27934), (14, 27946), (15, 27991), (17, 28033), (27, 28153), (28, 28159), (31, 28183), (40, 28258), (41, 28288), (43, 28312), (46, 28594),

Gene: Juno112_45 Start: 28810, Stop: 29589, Start Num: 7

Candidate Starts for Juno112_45:

(Start: 7 @28810 has 29 MA's), (9, 28825), (10, 28828), (12, 28876), (15, 28933), (17, 28975), (26, 29092), (27, 29101), (28, 29107), (30, 29119), (31, 29131), (40, 29206), (41, 29236), (42, 29248), (43, 29260), (46, 29527),

Gene: KHumphrey_46 Start: 28707, Stop: 29477, Start Num: 7

Candidate Starts for KHumphrey_46:

(Start: 7 @28707 has 29 MA's), (9, 28722), (10, 28725), (12, 28773), (15, 28830), (17, 28872), (21, 28935), (23, 28965), (27, 28992), (29, 29001), (32, 29031), (37, 29076), (38, 29082), (41, 29115), (46, 29415),

Gene: KendraB23_54 Start: 30394, Stop: 31191, Start Num: 7

Candidate Starts for KendraB23_54:

(Start: 7 @30394 has 29 MA's), (9, 30409), (10, 30412), (15, 30517), (23, 30652), (27, 30679), (28, 30685), (30, 30697), (31, 30709), (40, 30784), (41, 30814), (43, 30838), (49, 31144),

Gene: Kepler_46 Start: 28492, Stop: 29301, Start Num: 7

Candidate Starts for Kepler_46:

(Start: 7 @28492 has 29 MA's), (9, 28507), (10, 28510), (11, 28534), (12, 28558), (14, 28570), (15, 28615), (17, 28657), (27, 28777), (28, 28783), (31, 28807), (40, 28882), (41, 28912), (43, 28936), (46, 29218), (49, 29254),

Gene: Kuleana_46 Start: 28067, Stop: 28864, Start Num: 7

Candidate Starts for Kuleana_46:

(5, 28052), (Start: 7 @28067 has 29 MA's), (9, 28082), (11, 28109), (12, 28133), (17, 28232), (27, 28355), (31, 28385), (35, 28424), (37, 28451), (41, 28490), (43, 28514), (46, 28796), (47, 28799),

Gene: Leona_45 Start: 28887, Stop: 29669, Start Num: 7

Candidate Starts for Leona_45:

(Start: 7 @28887 has 29 MA's), (9, 28902), (10, 28905), (12, 28953), (15, 29010), (21, 29115), (22, 29124), (23, 29145), (27, 29172), (29, 29181), (32, 29211), (37, 29256), (38, 29262), (41, 29295), (46, 29595),

Gene: LittleTokyo_44 Start: 27580, Stop: 28368, Start Num: 7

Candidate Starts for LittleTokyo_44:

(Start: 7 @27580 has 29 MA's), (9, 27595), (10, 27598), (11, 27622), (12, 27646), (15, 27703), (16, 27736), (17, 27745), (23, 27838), (24, 27850), (25, 27856), (27, 27862), (29, 27871), (31, 27892), (37, 27958), (41, 27997), (43, 28021), (46, 28288), (53, 28345),

Gene: Lunar_46 Start: 28408, Stop: 29217, Start Num: 7

Candidate Starts for Lunar_46:

(Start: 7 @28408 has 29 MA's), (9, 28423), (10, 28426), (11, 28450), (12, 28474), (14, 28486), (15, 28531), (17, 28573), (27, 28693), (28, 28699), (31, 28723), (40, 28798), (41, 28828), (43, 28852), (46, 29134), (49, 29170),

Gene: Melons_46 Start: 28222, Stop: 29031, Start Num: 7

Candidate Starts for Melons_46:

(Start: 7 @28222 has 29 MA's), (9, 28237), (10, 28240), (11, 28264), (12, 28288), (14, 28300), (15, 28345), (17, 28387), (27, 28507), (28, 28513), (31, 28537), (40, 28612), (41, 28642), (43, 28666), (46, 28948), (49, 28984),

Gene: Orcanus_44 Start: 29751, Stop: 30572, Start Num: 7

Candidate Starts for Orcanus_44:

(Start: 7 @29751 has 29 MA's), (9, 29766), (10, 29769), (15, 29874), (23, 30009), (27, 30036), (28, 30042), (31, 30066), (40, 30141), (41, 30171), (43, 30195), (50, 30510), (54, 30528),

Gene: OtsoOtso_52 Start: 27598, Stop: 28383, Start Num: 7

Candidate Starts for OtsoOtso_52:

(Start: 7 @27598 has 29 MA's), (9, 27613), (10, 27616), (11, 27640), (12, 27664), (14, 27676), (15, 27721), (17, 27763), (27, 27883), (28, 27889), (31, 27913), (40, 27988), (41, 28018), (43, 28042), (46, 28324),

Gene: Pelletreau_53 Start: 30207, Stop: 31004, Start Num: 7

Candidate Starts for Pelletreau_53:

(Start: 7 @30207 has 29 MA's), (9, 30222), (10, 30225), (15, 30330), (23, 30465), (27, 30492), (28, 30498), (30, 30510), (31, 30522), (40, 30597), (41, 30627), (43, 30651), (49, 30957),

Gene: PhluffyCoco_46 Start: 28908, Stop: 29687, Start Num: 7

Candidate Starts for PhluffyCoco_46:

(5, 28881), (Start: 7 @28908 has 29 MA's), (9, 28923), (10, 28926), (12, 28974), (15, 29031), (17, 29073), (26, 29190), (27, 29199), (28, 29205), (30, 29217), (31, 29229), (40, 29304), (41, 29334), (43, 29358), (46, 29625),

Gene: Polka_44 Start: 27598, Stop: 28383, Start Num: 7

Candidate Starts for Polka_44:

(Start: 7 @27598 has 29 MA's), (9, 27613), (10, 27616), (11, 27640), (12, 27664), (14, 27676), (15, 27721), (17, 27763), (27, 27883), (28, 27889), (31, 27913), (40, 27988), (41, 28018), (43, 28042), (46, 28324),

Gene: Rattail_46 Start: 29009, Stop: 29773, Start Num: 9

Candidate Starts for Rattail_46:

(5, 28967), (Start: 7 @28994 has 29 MA's), (9, 29009), (10, 29012), (12, 29060), (15, 29117), (17, 29159), (26, 29276), (27, 29285), (28, 29291), (30, 29303), (31, 29315), (40, 29390), (41, 29420), (43, 29444), (46, 29711),

Gene: RedFox_46 Start: 28907, Stop: 29686, Start Num: 7

Candidate Starts for RedFox_46:

(5, 28880), (Start: 7 @28907 has 29 MA's), (9, 28922), (10, 28925), (12, 28973), (15, 29030), (17, 29072), (26, 29189), (27, 29198), (28, 29204), (30, 29216), (31, 29228), (40, 29303), (41, 29333), (42, 29345), (43, 29357), (46, 29624),

Gene: Renna12_45 Start: 28764, Stop: 29543, Start Num: 7

Candidate Starts for Renna12_45:

(5, 28737), (Start: 7 @28764 has 29 MA's), (9, 28779), (15, 28887), (17, 28929), (22, 29001), (23, 29022), (27, 29049), (31, 29079), (37, 29145), (38, 29151), (41, 29184), (42, 29196), (46, 29484),

Gene: Ruchi_42 Start: 28585, Stop: 29382, Start Num: 7

Candidate Starts for Ruchi_42:

(Start: 7 @28585 has 29 MA's), (9, 28600), (10, 28603), (15, 28708), (23, 28843), (27, 28870), (28, 28876), (31, 28900), (40, 28975), (41, 29005), (43, 29029), (45, 29239), (48, 29305), (51, 29335),

Gene: StuartMinion_41 Start: 25861, Stop: 26658, Start Num: 7

Candidate Starts for StuartMinion_41:

(Start: 7 @25861 has 29 MA's), (9, 25876), (10, 25879), (12, 25927), (17, 26026), (20, 26086), (22, 26098), (23, 26119), (27, 26146), (29, 26155), (33, 26203), (36, 26218), (39, 26248), (41, 26278), (46, 26578),

Gene: TaylorSipht_44 Start: 29156, Stop: 29947, Start Num: 7

Candidate Starts for TaylorSipht_44:

(Start: 7 @29156 has 29 MA's), (9, 29171), (10, 29174), (15, 29279), (16, 29312), (27, 29441), (28, 29447), (31, 29471), (40, 29546), (41, 29576), (43, 29600), (45, 29819), (46, 29876),

Gene: Toad24_46 Start: 30447, Stop: 31244, Start Num: 7

Candidate Starts for Toad24_46:

(Start: 7 @30447 has 29 MA's), (9, 30462), (10, 30465), (15, 30570), (23, 30705), (27, 30732), (28, 30738), (30, 30750), (31, 30762), (40, 30837), (41, 30867), (43, 30891), (49, 31197),

Gene: Vulpecula_42 Start: 28262, Stop: 29059, Start Num: 7

Candidate Starts for Vulpecula_42:

(Start: 7 @28262 has 29 MA's), (9, 28277), (10, 28280), (15, 28385), (23, 28520), (27, 28547), (28, 28553), (31, 28577), (40, 28652), (41, 28682), (43, 28706), (45, 28916), (48, 28982), (51, 29012),

Gene: Westrich_52 Start: 30131, Stop: 30928, Start Num: 7

Candidate Starts for Westrich_52:

(Start: 7 @30131 has 29 MA's), (9, 30146), (10, 30149), (15, 30254), (23, 30389), (27, 30416), (28, 30422), (30, 30434), (31, 30446), (40, 30521), (41, 30551), (43, 30575), (49, 30881),

Gene: WileyE_49 Start: 29238, Stop: 30044, Start Num: 7

Candidate Starts for WileyE_49:

(Start: 7 @29238 has 29 MA's), (9, 29253), (17, 29403), (22, 29475), (23, 29496), (27, 29523), (29, 29532), (31, 29553), (35, 29592), (37, 29619), (38, 29625), (41, 29658), (43, 29682), (44, 29742), (48, 29967), (49, 29997),

Gene: Zhuangyuan_51 Start: 29358, Stop: 30155, Start Num: 7

Candidate Starts for Zhuangyuan_51:

(Start: 7 @29358 has 29 MA's), (9, 29373), (11, 29400), (12, 29424), (15, 29481), (23, 29616), (24, 29628), (26, 29640), (27, 29649), (28, 29655), (30, 29667), (31, 29679), (34, 29709), (40, 29754), (41, 29784), (42, 29796), (43, 29808), (46, 30075),