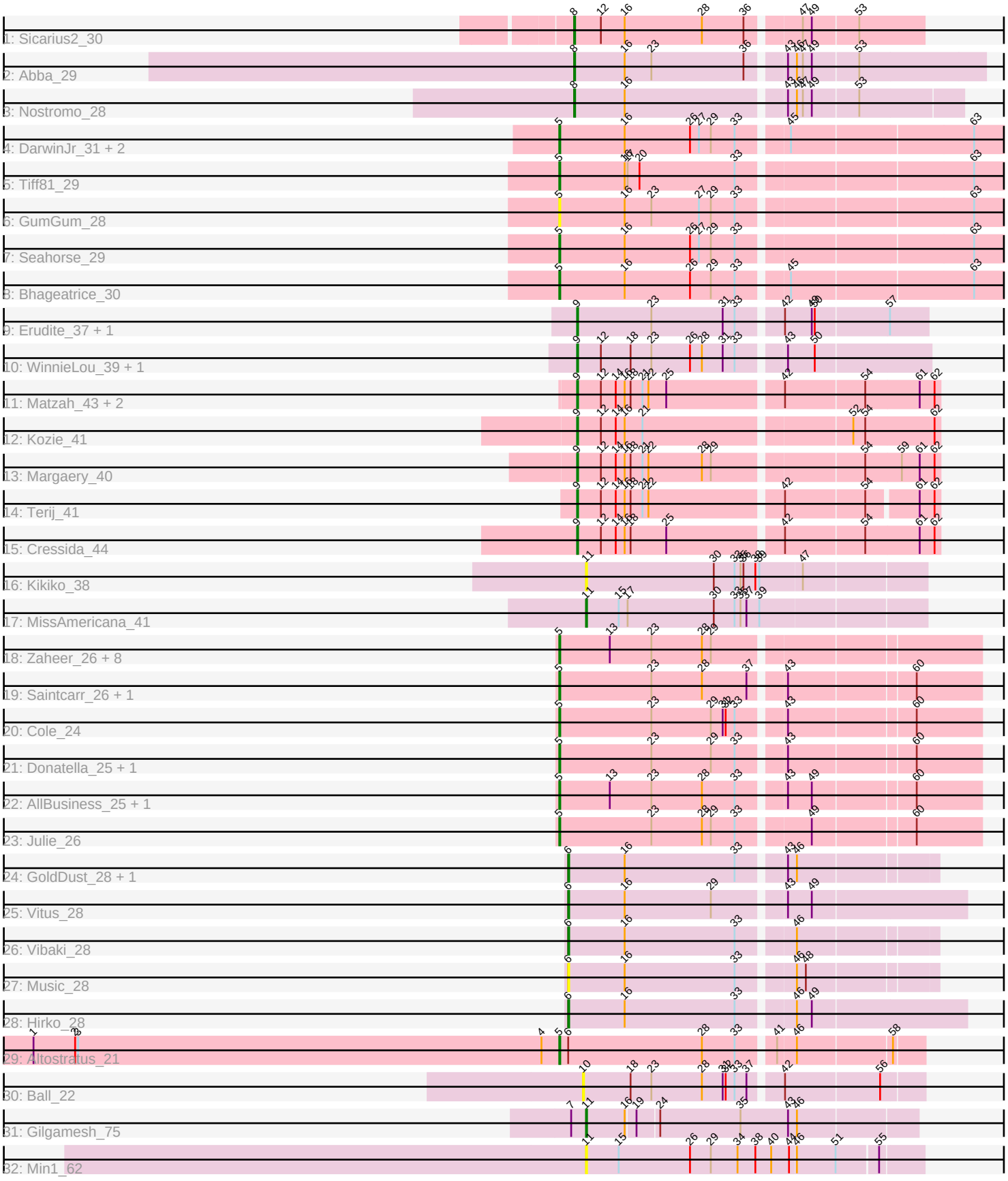
Pham 347720


1: Sicarius2_30
2: Abba_29
3: Nostromo_28
4: DarwinJr_31 + 2
5: Tiff81_29
6: GumGum_28
7: Seahorse_29
8: Bhageatrice_30
9: Erudite_37 + 1
10: WinnieLou_39 + 1
11: Matzah_43 + 2
12: Kozie_41
13: Margaery_40
14: Terij_41
15: Cressida_44
16: Kikiko_38
17: MissAmericana_41
18: Zaheer_26 + 8
19: Saintcarr_26 + 1
20: Cole_24
21: Donatella_25 + 1
22: AllBusiness_25 + 1
23: Julie_26
24: GoldDust_28 + 1
25: Vitus_28
26: Vibaki_28
27: Music_28
28: Hirko_28
29: Altostratus_21
30: Ball_22
31: Gilgamesh_75
32: Min1_62

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 347720 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347720 has 50 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Sicarius2_30
• Track 2 : Abba_29
• Track 3 : Nostromo_28
• Track 4 : DarwinJr_31, Anekin_27, Crescenzo_28
• Track 5 : Tiff81_29
• Track 6 : GumGum_28
• Track 7 : Seahorse_29
• Track 8 : Bhageatrice_30
• Track 9 : Erudite_37, Dauntless_37
• Track 10 : WinnieLou_39, Hager_39
• Track 11 : Matzah_43, Cinna_42, MementoMori_43
• Track 12 : Kozie_41
• Track 13 : Margaery_40
• Track 14 : Terij_41
• Track 15 : Cressida_44
• Track 16 : Kikiko_38
• Track 17 : MissAmericana_41
• Track 18 : Zaheer_26, Nandita_26, Guinevere_26, Lenoxika_26, GoodLuckBabe_26, Schism_26, Yonex_26, Ryan_26, Kihatsu_27
• Track 19 : Saintcarr_26, ToastyOats_28
• Track 20 : Cole_24
• Track 21 : Donatella_25, Popper_24
• Track 22 : AllBusiness_25, Toodles_26
• Track 23 : Julie_26
• Track 24 : GoldDust_28, Gooberta_28
• Track 25 : Vitus_28
• Track 26 : Vibaki_28
• Track 27 : Music_28
• Track 28 : Hirko_28
• Track 29 : Altostratus_21
• Track 30 : Ball_22
• Track 31 : Gilgamesh_75
• Track 32 : Min1_62

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

The start number called the most often in the published annotations is 5, it was called in 21 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AllBusiness_25, Altostratus_21, Anekin_27, Bhageatrice_30, Cole_24, Crescenzo_28, DarwinJr_31, Donatella_25, GoodLuckBabe_26, Guinevere_26, GumGum_28, Julie_26, Kihatsu_27, Lenoxika_26, Nandita_26, Popper_24, Ryan_26, Saintcarr_26, Schism_26, Seahorse_29, Tiff81_29, ToastyOats_28, Toodles_26, Yonex_26, Zaheer_26,

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

Genes that do not have the "Most Annotated" start:
• Abba_29, Ball_22, Cinna_42, Cressida_44, Dauntless_37, Erudite_37, Gilgamesh_75, GoldDust_28, Gooberta_28, Hager_39, Hirko_28, Kikiko_38, Kozie_41, Margaery_40, Matzah_43, MementoMori_43, Min1_62, MissAmericana_41, Music_28, Nostromo_28, Sicarius2_30, Terij_41, Vibaki_28, Vitus_28, WinnieLou_39,

Summary by start number:

Start 5:
• Found in 25 of 50 (50.0%) of genes in pham
• Manual Annotations of this start: 21 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AllBusiness_25 (FF), Altostratus_21 (FS), Anekin_27 (AY), Bhageatrice_30 (AY), Cole_24 (FF), Crescenzo_28 (AY), DarwinJr_31 (AY), Donatella_25 (FF), GoodLuckBabe_26 (FF), Guinevere_26 (FF), GumGum_28 (AY), Julie_26 (FF), Kihatsu_27 (FF), Lenoxika_26 (FF), Nandita_26 (FF), Popper_24 (FF), Ryan_26 (FF), Saintcarr_26 (FF), Schism_26 (FF), Seahorse_29 (AY), Tiff81_29 (AY), ToastyOats_28 (FF), Toodles_26 (FF), Yonex_26 (FF), Zaheer_26 (FF),

Start 6:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 5 of 41
• Called 85.7% of time when present
• Phage (with cluster) where this start called: GoldDust_28 (FL), Gooberta_28 (FL), Hirko_28 (FL), Music_28 (FL), Vibaki_28 (FL), Vitus_28 (FL),

Start 8:
• Found in 3 of 50 (6.0%) of genes in pham
• Manual Annotations of this start: 3 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abba_29 (AO3), Nostromo_28 (AO3), Sicarius2_30 (AO2),

Start 9:
• Found in 11 of 50 (22.0%) of genes in pham
• Manual Annotations of this start: 10 of 41
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Cinna_42 (EI), Cressida_44 (EI), Dauntless_37 (EF), Erudite_37 (EF), Hager_39 (EF), Kozie_41 (EI), Margaery_40 (EI), Matzah_43 (EI), MementoMori_43 (EI), Terij_41 (EI), WinnieLou_39 (EF),

Start 10:
• Found in 1 of 50 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ball_22 (singleton),

Start 11:
• Found in 4 of 50 (8.0%) of genes in pham
• Manual Annotations of this start: 2 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gilgamesh_75 (singleton), Kikiko_38 (EM2), Min1_62 (singleton), MissAmericana_41 (EM2),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, FS, EI, EF, AO3, AO2, FF, EM2, AY, FL,

Info for manual annotations of cluster AO2:
•Start number 8 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AO3:
•Start number 8 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AY:
•Start number 5 was manually annotated 6 times for cluster AY.

Info for manual annotations of cluster EF:
•Start number 9 was manually annotated 3 times for cluster EF.

Info for manual annotations of cluster EI:
•Start number 9 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster EM2:
•Start number 11 was manually annotated 1 time for cluster EM2.

Info for manual annotations of cluster FF:
•Start number 5 was manually annotated 14 times for cluster FF.

Info for manual annotations of cluster FL:
•Start number 6 was manually annotated 5 times for cluster FL.

Info for manual annotations of cluster FS:
•Start number 5 was manually annotated 1 time for cluster FS.

Gene Information:

Gene: Abba_29 Start: 24790, Stop: 25188, Start Num: 8
Candidate Starts for Abba_29:
(Start: 8 @24790 has 3 MA's), (16, 24841), (23, 24868), (36, 24961), (43, 24994), (46, 25003), (47, 25009), (49, 25018), (53, 25063),

Gene: AllBusiness_25 Start: 19877, Stop: 20281, Start Num: 5
Candidate Starts for AllBusiness_25:
(Start: 5 @19877 has 21 MA's), (13, 19928), (23, 19970), (28, 20021), (33, 20054), (43, 20096), (49, 20120), (60, 20216),

Gene: Altostratus_21 Start: 17562, Stop: 17909, Start Num: 5
Candidate Starts for Altostratus_21:
(1, 17031), (2, 17073), (3, 17076), (4, 17544), (Start: 5 @17562 has 21 MA's), (Start: 6 @17571 has 5 MA's), (28, 17706), (33, 17739), (41, 17772), (46, 17790), (58, 17880),

Gene: Anekin_27 Start: 20364, Stop: 20804, Start Num: 5
Candidate Starts for Anekin_27:
(Start: 5 @20364 has 21 MA's), (16, 20430), (26, 20496), (27, 20505), (29, 20517), (33, 20541), (45, 20586), (63, 20763),

Gene: Ball_22 Start: 18509, Stop: 18835, Start Num: 10
Candidate Starts for Ball_22:
(10, 18509), (18, 18557), (23, 18578), (28, 18629), (31, 18650), (32, 18653), (33, 18662), (37, 18674), (42, 18701), (56, 18794),

Gene: Bhageatrice_30 Start: 21686, Stop: 22126, Start Num: 5
Candidate Starts for Bhageatrice_30:
(Start: 5 @21686 has 21 MA's), (16, 21752), (26, 21818), (29, 21839), (33, 21863), (45, 21908), (63, 22085),

Gene: Cinna_42 Start: 32069, Stop: 32419, Start Num: 9
Candidate Starts for Cinna_42:
(Start: 9 @32069 has 10 MA's), (12, 32093), (14, 32108), (16, 32117), (18, 32123), (21, 32135), (22, 32141), (25, 32159), (42, 32267), (54, 32345), (61, 32399), (62, 32414),

Gene: Cole_24 Start: 19378, Stop: 19782, Start Num: 5
Candidate Starts for Cole_24:
(Start: 5 @19378 has 21 MA's), (23, 19471), (29, 19531), (31, 19543), (32, 19546), (33, 19555), (43, 19597), (60, 19717),

Gene: Crescenzo_28 Start: 20292, Stop: 20732, Start Num: 5
Candidate Starts for Crescenzo_28:
(Start: 5 @20292 has 21 MA's), (16, 20358), (26, 20424), (27, 20433), (29, 20445), (33, 20469), (45, 20514), (63, 20691),

Gene: Cressida_44 Start: 31537, Stop: 31887, Start Num: 9
Candidate Starts for Cressida_44:
(Start: 9 @31537 has 10 MA's), (12, 31561), (14, 31576), (16, 31585), (18, 31591), (25, 31627), (42, 31735), (54, 31813), (61, 31867), (62, 31882),

Gene: DarwinJr_31 Start: 21596, Stop: 22036, Start Num: 5
Candidate Starts for DarwinJr_31:

(Start: 5 @21596 has 21 MA's), (16, 21662), (26, 21728), (27, 21737), (29, 21749), (33, 21773), (45, 21818), (63, 21995),

Gene: Dauntless_37 Start: 24444, Stop: 24782, Start Num: 9
Candidate Starts for Dauntless_37:
(Start: 9 @24444 has 10 MA's), (23, 24519), (31, 24591), (33, 24603), (42, 24642), (49, 24669), (50, 24672), (57, 24744),

Gene: Donatella_25 Start: 19842, Stop: 20246, Start Num: 5
Candidate Starts for Donatella_25:
(Start: 5 @19842 has 21 MA's), (23, 19935), (29, 19995), (33, 20019), (43, 20061), (60, 20181),

Gene: Erudite_37 Start: 24444, Stop: 24782, Start Num: 9
Candidate Starts for Erudite_37:
(Start: 9 @24444 has 10 MA's), (23, 24519), (31, 24591), (33, 24603), (42, 24642), (49, 24669), (50, 24672), (57, 24744),

Gene: Gilgamesh_75 Start: 70806, Stop: 71129, Start Num: 11
Candidate Starts for Gilgamesh_75:
(7, 70791), (Start: 11 @70806 has 2 MA's), (16, 70845), (19, 70854), (24, 70875), (35, 70956), (43, 71004), (46, 71013),

Gene: GoldDust_28 Start: 26513, Stop: 26863, Start Num: 6
Candidate Starts for GoldDust_28:
(Start: 6 @26513 has 5 MA's), (16, 26570), (33, 26681), (43, 26723), (46, 26732),

Gene: Gooberta_28 Start: 26512, Stop: 26862, Start Num: 6
Candidate Starts for Gooberta_28:
(Start: 6 @26512 has 5 MA's), (16, 26569), (33, 26680), (43, 26722), (46, 26731),

Gene: GoodLuckBabe_26 Start: 19987, Stop: 20391, Start Num: 5
Candidate Starts for GoodLuckBabe_26:
(Start: 5 @19987 has 21 MA's), (13, 20038), (23, 20080), (28, 20131), (29, 20140),

Gene: Guinevere_26 Start: 19577, Stop: 19981, Start Num: 5
Candidate Starts for Guinevere_26:
(Start: 5 @19577 has 21 MA's), (13, 19628), (23, 19670), (28, 19721), (29, 19730),

Gene: GumGum_28 Start: 20348, Stop: 20788, Start Num: 5
Candidate Starts for GumGum_28:
(Start: 5 @20348 has 21 MA's), (16, 20414), (23, 20441), (27, 20489), (29, 20501), (33, 20525), (63, 20747),

Gene: Hager_39 Start: 24364, Stop: 24705, Start Num: 9
Candidate Starts for Hager_39:
(Start: 9 @24364 has 10 MA's), (12, 24388), (18, 24418), (23, 24439), (26, 24478), (28, 24490), (31, 24511), (33, 24523), (43, 24565), (50, 24592),

Gene: Hirko_28 Start: 26841, Stop: 27227, Start Num: 6
Candidate Starts for Hirko_28:
(Start: 6 @26841 has 5 MA's), (16, 26898), (33, 27009), (46, 27060), (49, 27075),

Gene: Julie_26 Start: 20028, Stop: 20432, Start Num: 5

Candidate Starts for Julie_26:
(Start: 5 @20028 has 21 MA's), (23, 20121), (28, 20172), (29, 20181), (33, 20205), (49, 20271), (60, 20367),

Gene: Kihatsu_27 Start: 19902, Stop: 20306, Start Num: 5
Candidate Starts for Kihatsu_27:
(Start: 5 @19902 has 21 MA's), (13, 19953), (23, 19995), (28, 20046), (29, 20055),

Gene: Kikiko_38 Start: 43382, Stop: 43717, Start Num: 11
Candidate Starts for Kikiko_38:
(Start: 11 @43382 has 2 MA's), (30, 43511), (33, 43532), (35, 43538), (36, 43541), (38, 43553), (39, 43556), (47, 43598),

Gene: Kozie_41 Start: 31141, Stop: 31491, Start Num: 9
Candidate Starts for Kozie_41:
(Start: 9 @31141 has 10 MA's), (12, 31165), (14, 31180), (16, 31189), (21, 31207), (52, 31405), (54, 31417), (62, 31486),

Gene: Lenoxika_26 Start: 19573, Stop: 19977, Start Num: 5
Candidate Starts for Lenoxika_26:
(Start: 5 @19573 has 21 MA's), (13, 19624), (23, 19666), (28, 19717), (29, 19726),

Gene: Margaery_40 Start: 30916, Stop: 31266, Start Num: 9
Candidate Starts for Margaery_40:
(Start: 9 @30916 has 10 MA's), (12, 30940), (14, 30955), (16, 30964), (18, 30970), (21, 30982), (22, 30988), (28, 31042), (29, 31051), (54, 31192), (59, 31228), (61, 31246), (62, 31261),

Gene: Matzah_43 Start: 32009, Stop: 32359, Start Num: 9
Candidate Starts for Matzah_43:
(Start: 9 @32009 has 10 MA's), (12, 32033), (14, 32048), (16, 32057), (18, 32063), (21, 32075), (22, 32081), (25, 32099), (42, 32207), (54, 32285), (61, 32339), (62, 32354),

Gene: MementoMori_43 Start: 31757, Stop: 32107, Start Num: 9
Candidate Starts for MementoMori_43:
(Start: 9 @31757 has 10 MA's), (12, 31781), (14, 31796), (16, 31805), (18, 31811), (21, 31823), (22, 31829), (25, 31847), (42, 31955), (54, 32033), (61, 32087), (62, 32102),

Gene: Min1_62 Start: 37038, Stop: 37367, Start Num: 11
Candidate Starts for Min1_62:
(Start: 11 @37038 has 2 MA's), (15, 37071), (26, 37143), (29, 37164), (34, 37191), (38, 37209), (40, 37224), (44, 37242), (46, 37248), (51, 37287), (55, 37326),

Gene: MissAmericana_41 Start: 43312, Stop: 43647, Start Num: 11
Candidate Starts for MissAmericana_41:
(Start: 11 @43312 has 2 MA's), (15, 43345), (17, 43354), (30, 43441), (33, 43462), (35, 43468), (37, 43474), (39, 43486),

Gene: Music_28 Start: 26363, Stop: 26713, Start Num: 6
Candidate Starts for Music_28:
(Start: 6 @26363 has 5 MA's), (16, 26420), (33, 26531), (46, 26582), (48, 26591),

Gene: Nandita_26 Start: 19577, Stop: 19981, Start Num: 5
Candidate Starts for Nandita_26:

(Start: 5 @19577 has 21 MA's), (13, 19628), (23, 19670), (28, 19721), (29, 19730),

Gene: Nostromo_28 Start: 24269, Stop: 24643, Start Num: 8
Candidate Starts for Nostromo_28:
(Start: 8 @24269 has 3 MA's), (16, 24320), (43, 24473), (46, 24482), (47, 24488), (49, 24497), (53, 24542),

Gene: Popper_24 Start: 19482, Stop: 19886, Start Num: 5
Candidate Starts for Popper_24:
(Start: 5 @19482 has 21 MA's), (23, 19575), (29, 19635), (33, 19659), (43, 19701), (60, 19821),

Gene: Ryan_26 Start: 20167, Stop: 20571, Start Num: 5
Candidate Starts for Ryan_26:
(Start: 5 @20167 has 21 MA's), (13, 20218), (23, 20260), (28, 20311), (29, 20320),

Gene: Saintcarr_26 Start: 19723, Stop: 20127, Start Num: 5
Candidate Starts for Saintcarr_26:
(Start: 5 @19723 has 21 MA's), (23, 19816), (28, 19867), (37, 19912), (43, 19942), (60, 20062),

Gene: Schism_26 Start: 19577, Stop: 19981, Start Num: 5
Candidate Starts for Schism_26:
(Start: 5 @19577 has 21 MA's), (13, 19628), (23, 19670), (28, 19721), (29, 19730),

Gene: Seahorse_29 Start: 20763, Stop: 21203, Start Num: 5
Candidate Starts for Seahorse_29:
(Start: 5 @20763 has 21 MA's), (16, 20829), (26, 20895), (27, 20904), (29, 20916), (33, 20940), (63, 21162),

Gene: Sicarius2_30 Start: 24899, Stop: 25237, Start Num: 8
Candidate Starts for Sicarius2_30:
(Start: 8 @24899 has 3 MA's), (12, 24926), (16, 24950), (28, 25028), (36, 25070), (47, 25118), (49, 25127), (53, 25172),

Gene: Terij_41 Start: 30364, Stop: 30708, Start Num: 9
Candidate Starts for Terij_41:
(Start: 9 @30364 has 10 MA's), (12, 30388), (14, 30403), (16, 30412), (18, 30418), (21, 30430), (22, 30436), (42, 30562), (54, 30640), (61, 30688), (62, 30703),

Gene: Tiff81_29 Start: 20491, Stop: 20931, Start Num: 5
Candidate Starts for Tiff81_29:
(Start: 5 @20491 has 21 MA's), (16, 20557), (17, 20560), (20, 20572), (33, 20668), (63, 20890),

Gene: ToastyOats_28 Start: 20181, Stop: 20585, Start Num: 5
Candidate Starts for ToastyOats_28:
(Start: 5 @20181 has 21 MA's), (23, 20274), (28, 20325), (37, 20370), (43, 20400), (60, 20520),

Gene: Toodles_26 Start: 20007, Stop: 20411, Start Num: 5
Candidate Starts for Toodles_26:
(Start: 5 @20007 has 21 MA's), (13, 20058), (23, 20100), (28, 20151), (33, 20184), (43, 20226), (49, 20250), (60, 20346),

Gene: Vibaki_28 Start: 26388, Stop: 26738, Start Num: 6
Candidate Starts for Vibaki_28:

(Start: 6 @26388 has 5 MA's), (16, 26445), (33, 26556), (46, 26607),

Gene: Vitus_28 Start: 23173, Stop: 23559, Start Num: 6
Candidate Starts for Vitus_28:
(Start: 6 @23173 has 5 MA's), (16, 23230), (29, 23317), (43, 23383), (49, 23407),

Gene: WinnieLou_39 Start: 24433, Stop: 24774, Start Num: 9
Candidate Starts for WinnieLou_39:
(Start: 9 @24433 has 10 MA's), (12, 24457), (18, 24487), (23, 24508), (26, 24547), (28, 24559), (31, 24580), (33, 24592), (43, 24634), (50, 24661),

Gene: Yonex_26 Start: 20167, Stop: 20571, Start Num: 5
Candidate Starts for Yonex_26:
(Start: 5 @20167 has 21 MA's), (13, 20218), (23, 20260), (28, 20311), (29, 20320),

Gene: Zaheer_26 Start: 20256, Stop: 20660, Start Num: 5
Candidate Starts for Zaheer_26:
(Start: 5 @20256 has 21 MA's), (13, 20307), (23, 20349), (28, 20400), (29, 20409),