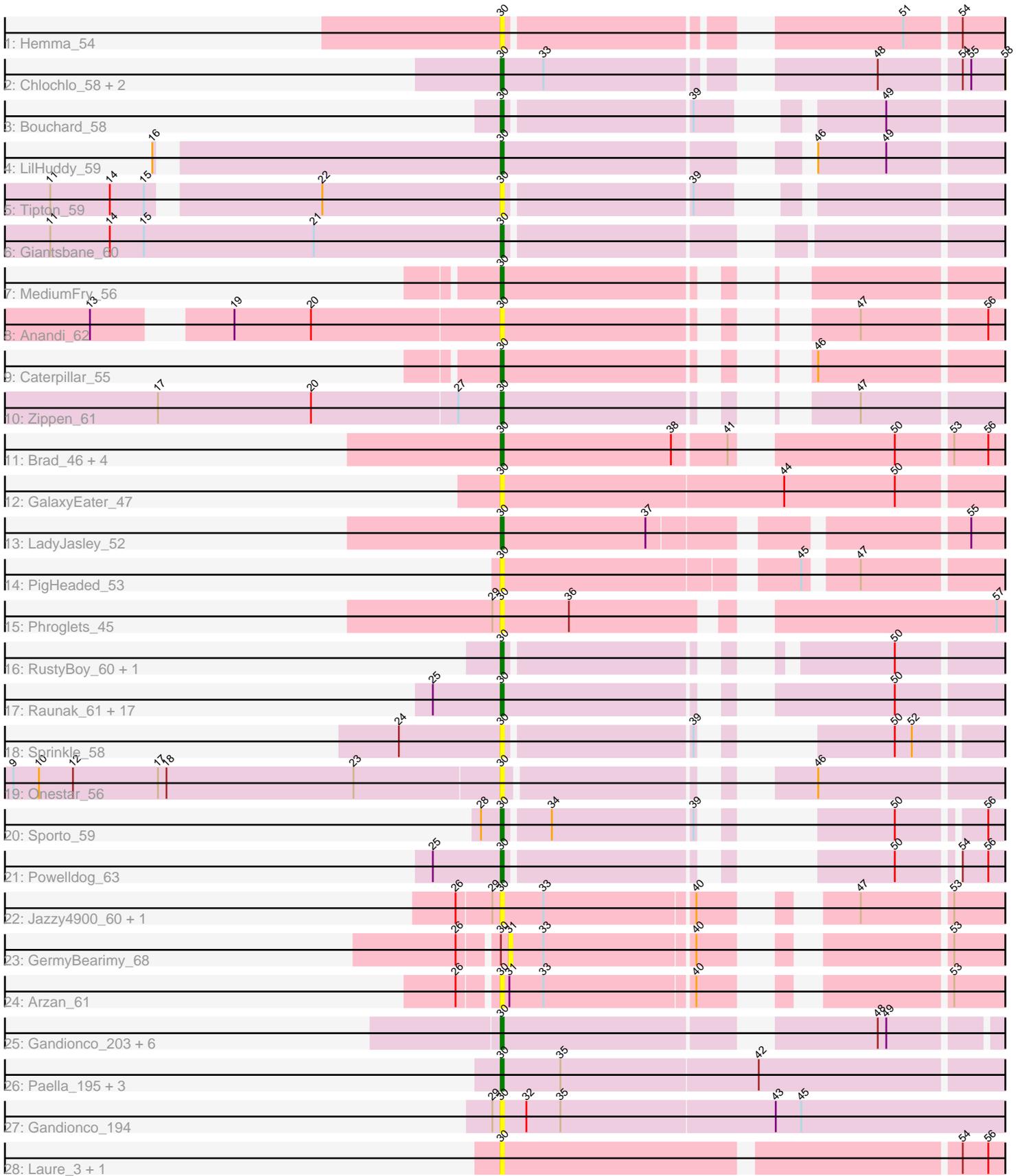# Zoomed Pham 283805

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 283805 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283805 has 63 members, 24 are drafts.

Phages represented in each track:
• Track 1 : Hemma_54
• Track 2 : Chlochlo_58, Tokki_63, Phaby_60
• Track 3 : Bouchard_58
• Track 4 : LilHuddy_59
• Track 5 : Tipton_59
• Track 6 : Giantsbane_60
• Track 7 : MediumFry_56
• Track 8 : Anandi_62
• Track 9 : Caterpillar_55
• Track 10 : Zippen_61
• Track 11 : Brad_46, Jasmine_48, GurgleFerb_46, Adat_46, Nellie_46
• Track 12 : GalaxyEater_47
• Track 13 : LadyJasley_52
• Track 14 : PigHeaded_53
• Track 15 : Phroglets_45
• Track 16 : RustyBoy_60, Natasha_60
• Track 17 : Raunak_61, DoctorPepper_58, MrAaronian_59, Salk_59, BronxBay_59, HerbBucket_58, Djungelskog_58, Stayer_59, Jeremy4pt0_57, Egad_59, Sloopyjoe_59, Linda_59, Boog_58, Shiba_58, Spain_60, Michelle_59, ProfFrink_59, StarLord_59
• Track 18 : Sprinkle_58
• Track 19 : Onestar_56
• Track 20 : Sporto_59
• Track 21 : Powelldog_63
• Track 22 : Jazzy4900_60, Sunny4976_59
• Track 23 : GermyBearimy_68
• Track 24 : Arzan_61
• Track 25 : Gandionco_203, Elver_204, Kureo_201, Marianna39_203, Qui_205, Paella_205, JeNeSaisPas_199
• Track 26 : Paella_195, JeNeSaisPas_189, Qui_195, Elver_194
• Track 27 : Gandionco_194
• Track 28 : Laure_3, Laure_321

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

The start number called the most often in the published annotations is 30, it was called in 39 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adat_46, Anandi_62, Arzan_61, Boog_58, Bouchard_58, Brad_46, BronxBay_59, Caterpillar_55, Chlochlo_58, Djungelskog_58, DoctorPepper_58, Egad_59, Elver_194, Elver_204, GalaxyEater_47, Gandionco_194, Gandionco_203, Giantsbane_60, GurgleFerb_46, Hemma_54, HerbBucket_58, Jasmine_48, Jazzy4900_60, JeNeSaisPas_189, JeNeSaisPas_199, Jeremy4pt0_57, Kureo_201, LadyJasley_52, Laure_3, Laure_321, LilHuddy_59, Linda_59, Marianna39_203, MediumFry_56, Michelle_59, MrAaronian_59, Natasha_60, Nellie_46, Onestar_56, Paella_195, Paella_205, Phaby_60, Phroglets_45, PigHeaded_53, Powelldog_63, ProfFrink_59, Qui_195, Qui_205, Raunak_61, RustyBoy_60, Salk_59, Shiba_58, Sloopyjoe_59, Spain_60, Sporto_59, Sprinkle_58, StarLord_59, Stayer_59, Sunny4976_59, Tipton_59, Tokki_63, Zippen_61,

Genes that have the "Most Annotated" start but do not call it:
• GermyBearimy_68,

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

**Summary by start number:**

Start 30:
• Found in 63 of 63 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 39 of 39
• Called 98.4% of time when present
• Phage (with cluster) where this start called: Adat_46 (AV), Anandi_62 (AU4), Arzan_61 (FI), Boog_58 (AW), Bouchard_58 (AU2), Brad_46 (AV), BronxBay_59 (AW), Caterpillar_55 (AU4), Chlochlo_58 (AU2), Djungelskog_58 (AW), DoctorPepper_58 (AW), Egad_59 (AW), Elver_194 (FK), Elver_204 (FK), GalaxyEater_47 (AV), Gandionco_194 (FK), Gandionco_203 (FK), Giantsbane_60 (AU2), GurgleFerb_46 (AV), Hemma_54 (AU1), HerbBucket_58 (AW), Jasmine_48 (AV), Jazzy4900_60 (FI), JeNeSaisPas_189 (FK), JeNeSaisPas_199 (FK), Jeremy4pt0_57 (AW), Kureo_201 (FK), LadyJasley_52 (AV), Laure_3 (UNK), Laure_321 (UNK), LilHuddy_59 (AU2), Linda_59 (AW), Marianna39_203 (FK), MediumFry_56 (AU4), Michelle_59 (AW), MrAaronian_59 (AW), Natasha_60 (AW), Nellie_46 (AV), Onestar_56 (AW), Paella_195 (FK), Paella_205 (FK), Phaby_60 (AU2), Phroglets_45 (AV), PigHeaded_53 (AV), Powelldog_63 (AW), ProfFrink_59 (AW), Qui_195 (FK), Qui_205 (FK), Raunak_61 (AW), RustyBoy_60 (AW), Salk_59 (AW), Shiba_58 (AW), Sloopyjoe_59 (AW), Spain_60 (AW), Sporto_59 (AW), Sprinkle_58 (AW), StarLord_59 (AW), Stayer_59 (AW), Sunny4976_59 (FI), Tipton_59 (AU2), Tokki_63 (AU2), Zippen_61 (AU7),

Start 31:
• Found in 2 of 63 ( 3.2% ) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: GermyBearimy_68 (FI),

**Summary by clusters:**

There are 9 clusters represented in this pham: UNK, AU7, AU1, AU2, AU4, AW, AV, FI, FK,


Info for manual annotations of cluster AU2:
•Start number 30 was manually annotated 6 times for cluster AU2.

Info for manual annotations of cluster AU4:
•Start number 30 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU7:
•Start number 30 was manually annotated 1 time for cluster AU7.

Info for manual annotations of cluster AV:
•Start number 30 was manually annotated 6 times for cluster AV.

Info for manual annotations of cluster AW:
•Start number 30 was manually annotated 18 times for cluster AW.


Info for manual annotations of cluster FK:
•Start number 30 was manually annotated 6 times for cluster FK.


*Gene Information:*
Gene: Adat_46 Start: 38749, Stop: 38522, Start Num: 30
Candidate Starts for Adat_46:
(Start: 30 @38749 has 39 MA's), (38, 38689), (41, 38671), (50, 38626), (53, 38608), (56, 38596), (62, 38566), (63, 38554),

Gene: Anandi_62 Start: 42937, Stop: 43143, Start Num: 30
Candidate Starts for Anandi_62:
(1, 42571), (2, 42592), (3, 42625), (4, 42628), (5, 42676), (7, 42772), (8, 42775), (13, 42808), (19, 42844), (20, 42871), (Start: 30 @42937 has 39 MA's), (47, 43027), (56, 43069),

Gene: Arzan_61 Start: 42083, Stop: 42295, Start Num: 30
Candidate Starts for Arzan_61:
(26, 42071), (Start: 30 @42083 has 39 MA's), (31, 42086), (33, 42098), (40, 42149), (53, 42212), (62, 42254),

Gene: Boog_58 Start: 40523, Stop: 40729, Start Num: 30
Candidate Starts for Boog_58:
(25, 40499), (Start: 30 @40523 has 39 MA's), (50, 40637),

Gene: Bouchard_58 Start: 42753, Stop: 42968, Start Num: 30
Candidate Starts for Bouchard_58:
(Start: 30 @42753 has 39 MA's), (39, 42816), (49, 42861), (59, 42915), (62, 42924),

Gene: Brad_46 Start: 38747, Stop: 38520, Start Num: 30

Candidate Starts for Brad_46:
(Start: 30 @38747 has 39 MA's), (38, 38687), (41, 38669), (50, 38624), (53, 38606), (56, 38594), (62, 38564), (63, 38552),

Gene: BronxBay_59 Start: 40779, Stop: 40985, Start Num: 30
Candidate Starts for BronxBay_59:
(25, 40755), (Start: 30 @40779 has 39 MA's), (50, 40893),

Gene: Caterpillar_55 Start: 41730, Stop: 41939, Start Num: 30
Candidate Starts for Caterpillar_55:
(Start: 30 @41730 has 39 MA's), (46, 41805),

Gene: Chlochlo_58 Start: 42264, Stop: 42494, Start Num: 30
Candidate Starts for Chlochlo_58:
(Start: 30 @42264 has 39 MA's), (33, 42279), (48, 42378), (54, 42405), (55, 42408), (58, 42420), (61, 42441),

Gene: Djungelskog_58 Start: 40778, Stop: 40984, Start Num: 30
Candidate Starts for Djungelskog_58:
(25, 40754), (Start: 30 @40778 has 39 MA's), (50, 40892),

Gene: DoctorPepper_58 Start: 40483, Stop: 40689, Start Num: 30
Candidate Starts for DoctorPepper_58:
(25, 40459), (Start: 30 @40483 has 39 MA's), (50, 40597),

Gene: Egad_59 Start: 40780, Stop: 40986, Start Num: 30
Candidate Starts for Egad_59:
(25, 40756), (Start: 30 @40780 has 39 MA's), (50, 40894),

Gene: Elver_204 Start: 95821, Stop: 96039, Start Num: 30
Candidate Starts for Elver_204:
(Start: 30 @95821 has 39 MA's), (48, 95938), (49, 95941), (64, 96016),

Gene: Elver_194 Start: 92856, Stop: 93140, Start Num: 30
Candidate Starts for Elver_194:
(Start: 30 @92856 has 39 MA's), (35, 92877), (42, 92946), (66, 93075), (67, 93096),

Gene: GalaxyEater_47 Start: 40716, Stop: 40483, Start Num: 30
Candidate Starts for GalaxyEater_47:
(Start: 30 @40716 has 39 MA's), (44, 40617), (50, 40578), (59, 40527),

Gene: Gandionco_203 Start: 95382, Stop: 95600, Start Num: 30
Candidate Starts for Gandionco_203:
(Start: 30 @95382 has 39 MA's), (48, 95499), (49, 95502), (64, 95577),

Gene: Gandionco_194 Start: 92260, Stop: 92541, Start Num: 30
Candidate Starts for Gandionco_194:
(29, 92257), (Start: 30 @92260 has 39 MA's), (32, 92269), (35, 92281), (43, 92356), (45, 92365), (59, 92452), (66, 92482),

Gene: GermyBearimy_68 Start: 43449, Stop: 43655, Start Num: 31
Candidate Starts for GermyBearimy_68:

(26, 43434), (Start: 30 @43446 has 39 MA's), (31, 43449), (33, 43461), (40, 43512), (53, 43575), (62, 43617),

Gene: Giantsbane_60 Start: 41662, Stop: 41874, Start Num: 30
Candidate Starts for Giantsbane_60:
(11, 41503), (14, 41524), (15, 41536), (21, 41596), (Start: 30 @41662 has 39 MA's), (59, 41830), (62, 41839),

Gene: GurgleFerb_46 Start: 38748, Stop: 38521, Start Num: 30
Candidate Starts for GurgleFerb_46:
(Start: 30 @38748 has 39 MA's), (38, 38688), (41, 38670), (50, 38625), (53, 38607), (56, 38595), (62, 38565), (63, 38553),

Gene: Hemma_54 Start: 39492, Stop: 39722, Start Num: 30
Candidate Starts for Hemma_54:
(Start: 30 @39492 has 39 MA's), (51, 39612), (54, 39630),

Gene: HerbBucket_58 Start: 40520, Stop: 40726, Start Num: 30
Candidate Starts for HerbBucket_58:
(25, 40496), (Start: 30 @40520 has 39 MA's), (50, 40634),

Gene: Jasmine_48 Start: 40368, Stop: 40141, Start Num: 30
Candidate Starts for Jasmine_48:
(Start: 30 @40368 has 39 MA's), (38, 40308), (41, 40290), (50, 40245), (53, 40227), (56, 40215), (62, 40185), (63, 40173),

Gene: Jazzy4900_60 Start: 42861, Stop: 43070, Start Num: 30
Candidate Starts for Jazzy4900_60:
(26, 42846), (29, 42858), (Start: 30 @42861 has 39 MA's), (33, 42876), (40, 42927), (47, 42960), (53, 42990), (62, 43032),

Gene: JeNeSaisPas_189 Start: 92977, Stop: 93261, Start Num: 30
Candidate Starts for JeNeSaisPas_189:
(Start: 30 @92977 has 39 MA's), (35, 92998), (42, 93067), (66, 93196), (67, 93217),

Gene: JeNeSaisPas_199 Start: 95942, Stop: 96160, Start Num: 30
Candidate Starts for JeNeSaisPas_199:
(Start: 30 @95942 has 39 MA's), (48, 96059), (49, 96062), (64, 96137),

Gene: Jeremy4pt0_57 Start: 40478, Stop: 40684, Start Num: 30
Candidate Starts for Jeremy4pt0_57:
(25, 40454), (Start: 30 @40478 has 39 MA's), (50, 40592),

Gene: Kureo_201 Start: 94486, Stop: 94704, Start Num: 30
Candidate Starts for Kureo_201:
(Start: 30 @94486 has 39 MA's), (48, 94603), (49, 94606), (64, 94681),

Gene: LadyJasley_52 Start: 41063, Stop: 40851, Start Num: 30
Candidate Starts for LadyJasley_52:
(Start: 30 @41063 has 39 MA's), (37, 41012), (55, 40916), (65, 40871),

Gene: Laure_3 Start: 1466, Stop: 1239, Start Num: 30
Candidate Starts for Laure_3:

(Start: 30 @1466 has 39 MA's), (54, 1313), (56, 1304), (60, 1280), (62, 1274),

Gene: Laure_321 Start: 169814, Stop: 169587, Start Num: 30
Candidate Starts for Laure_321:
(Start: 30 @169814 has 39 MA's), (54, 169661), (56, 169652), (60, 169628), (62, 169622),

Gene: LilHuddy_59 Start: 42621, Stop: 42842, Start Num: 30
Candidate Starts for LilHuddy_59:
(16, 42507), (Start: 30 @42621 has 39 MA's), (46, 42711), (49, 42735), (62, 42798),

Gene: Linda_59 Start: 40776, Stop: 40982, Start Num: 30
Candidate Starts for Linda_59:
(25, 40752), (Start: 30 @40776 has 39 MA's), (50, 40890),

Gene: Marianna39_203 Start: 95985, Stop: 96203, Start Num: 30
Candidate Starts for Marianna39_203:
(Start: 30 @95985 has 39 MA's), (48, 96102), (49, 96105), (64, 96180),

Gene: MediumFry_56 Start: 42019, Stop: 42228, Start Num: 30
Candidate Starts for MediumFry_56:
(Start: 30 @42019 has 39 MA's),

Gene: Michelle_59 Start: 40778, Stop: 40984, Start Num: 30
Candidate Starts for Michelle_59:
(25, 40754), (Start: 30 @40778 has 39 MA's), (50, 40892),

Gene: MrAaronian_59 Start: 40778, Stop: 40984, Start Num: 30
Candidate Starts for MrAaronian_59:
(25, 40754), (Start: 30 @40778 has 39 MA's), (50, 40892),

Gene: Natasha_60 Start: 40520, Stop: 40720, Start Num: 30
Candidate Starts for Natasha_60:
(Start: 30 @40520 has 39 MA's), (50, 40625),

Gene: Nellie_46 Start: 38749, Stop: 38522, Start Num: 30
Candidate Starts for Nellie_46:
(Start: 30 @38749 has 39 MA's), (38, 38689), (41, 38671), (50, 38626), (53, 38608), (56, 38596), (62, 38566), (63, 38554),

Gene: Onestar_56 Start: 40321, Stop: 40536, Start Num: 30
Candidate Starts for Onestar_56:
(9, 40150), (10, 40159), (12, 40171), (17, 40201), (18, 40204), (23, 40270), (Start: 30 @40321 has 39 MA's), (46, 40405),

Gene: Paella_195 Start: 93732, Stop: 94016, Start Num: 30
Candidate Starts for Paella_195:
(Start: 30 @93732 has 39 MA's), (35, 93753), (42, 93822), (66, 93951), (67, 93972),

Gene: Paella_205 Start: 96697, Stop: 96915, Start Num: 30
Candidate Starts for Paella_205:
(Start: 30 @96697 has 39 MA's), (48, 96814), (49, 96817), (64, 96892),

Gene: Phaby_60 Start: 43170, Stop: 43400, Start Num: 30

Candidate Starts for Phaby_60:
(Start: 30 @43170 has 39 MA's), (33, 43185), (48, 43284), (54, 43311), (55, 43314), (58, 43326), (61, 43347),

Gene: Phroglets_45 Start: 39401, Stop: 39186, Start Num: 30
Candidate Starts for Phroglets_45:
(29, 39404), (Start: 30 @39401 has 39 MA's), (36, 39377), (57, 39248),

Gene: PigHeaded_53 Start: 40411, Stop: 40187, Start Num: 30
Candidate Starts for PigHeaded_53:
(Start: 30 @40411 has 39 MA's), (45, 40315), (47, 40300),

Gene: Powelldog_63 Start: 41666, Stop: 41854, Start Num: 30
Candidate Starts for Powelldog_63:
(25, 41642), (Start: 30 @41666 has 39 MA's), (50, 41762), (54, 41780), (56, 41789), (59, 41810),

Gene: ProfFrink_59 Start: 40779, Stop: 40985, Start Num: 30
Candidate Starts for ProfFrink_59:
(25, 40755), (Start: 30 @40779 has 39 MA's), (50, 40893),

Gene: Qui_205 Start: 96694, Stop: 96912, Start Num: 30
Candidate Starts for Qui_205:
(Start: 30 @96694 has 39 MA's), (48, 96811), (49, 96814), (64, 96889),

Gene: Qui_195 Start: 93729, Stop: 94013, Start Num: 30
Candidate Starts for Qui_195:
(Start: 30 @93729 has 39 MA's), (35, 93750), (42, 93819), (66, 93948), (67, 93969),

Gene: Raunak_61 Start: 40476, Stop: 40682, Start Num: 30
Candidate Starts for Raunak_61:
(25, 40452), (Start: 30 @40476 has 39 MA's), (50, 40590),

Gene: RustyBoy_60 Start: 40501, Stop: 40701, Start Num: 30
Candidate Starts for RustyBoy_60:
(Start: 30 @40501 has 39 MA's), (50, 40606),

Gene: Salk_59 Start: 40776, Stop: 40982, Start Num: 30
Candidate Starts for Salk_59:
(25, 40752), (Start: 30 @40776 has 39 MA's), (50, 40890),

Gene: Shiba_58 Start: 40476, Stop: 40682, Start Num: 30
Candidate Starts for Shiba_58:
(25, 40452), (Start: 30 @40476 has 39 MA's), (50, 40590),

Gene: Sloopyjoe_59 Start: 40780, Stop: 40986, Start Num: 30
Candidate Starts for Sloopyjoe_59:
(25, 40756), (Start: 30 @40780 has 39 MA's), (50, 40894),

Gene: Spain_60 Start: 40778, Stop: 40984, Start Num: 30
Candidate Starts for Spain_60:
(25, 40754), (Start: 30 @40778 has 39 MA's), (50, 40892),

Gene: Sporto_59 Start: 42046, Stop: 42234, Start Num: 30

Candidate Starts for Sporto_59:
(28, 42040), (Start: 30 @42046 has 39 MA's), (34, 42061), (39, 42109), (50, 42142), (56, 42169),

Gene: Sprinkle_58 Start: 41108, Stop: 41296, Start Num: 30
Candidate Starts for Sprinkle_58:
(24, 41072), (Start: 30 @41108 has 39 MA's), (39, 41171), (50, 41204), (52, 41210),

Gene: StarLord_59 Start: 40779, Stop: 40985, Start Num: 30
Candidate Starts for StarLord_59:
(25, 40755), (Start: 30 @40779 has 39 MA's), (50, 40893),

Gene: Stayer_59 Start: 40776, Stop: 40982, Start Num: 30
Candidate Starts for Stayer_59:
(25, 40752), (Start: 30 @40776 has 39 MA's), (50, 40890),

Gene: Sunny4976_59 Start: 42861, Stop: 43070, Start Num: 30
Candidate Starts for Sunny4976_59:
(26, 42846), (29, 42858), (Start: 30 @42861 has 39 MA's), (33, 42876), (40, 42927), (47, 42960), (53, 42990), (62, 43032),

Gene: Tipton_59 Start: 42959, Stop: 43174, Start Num: 30
Candidate Starts for Tipton_59:
(6, 42785), (11, 42809), (14, 42830), (15, 42842), (22, 42896), (Start: 30 @42959 has 39 MA's), (39, 43022), (59, 43121), (62, 43130),

Gene: Tokki_63 Start: 42783, Stop: 43004, Start Num: 30
Candidate Starts for Tokki_63:
(Start: 30 @42783 has 39 MA's), (33, 42798), (48, 42888), (54, 42915), (55, 42918), (58, 42930), (61, 42951),

Gene: Zippen_61 Start: 43340, Stop: 43552, Start Num: 30
Candidate Starts for Zippen_61:
(8, 43163), (17, 43220), (20, 43274), (27, 43325), (Start: 30 @43340 has 39 MA's), (47, 43430),