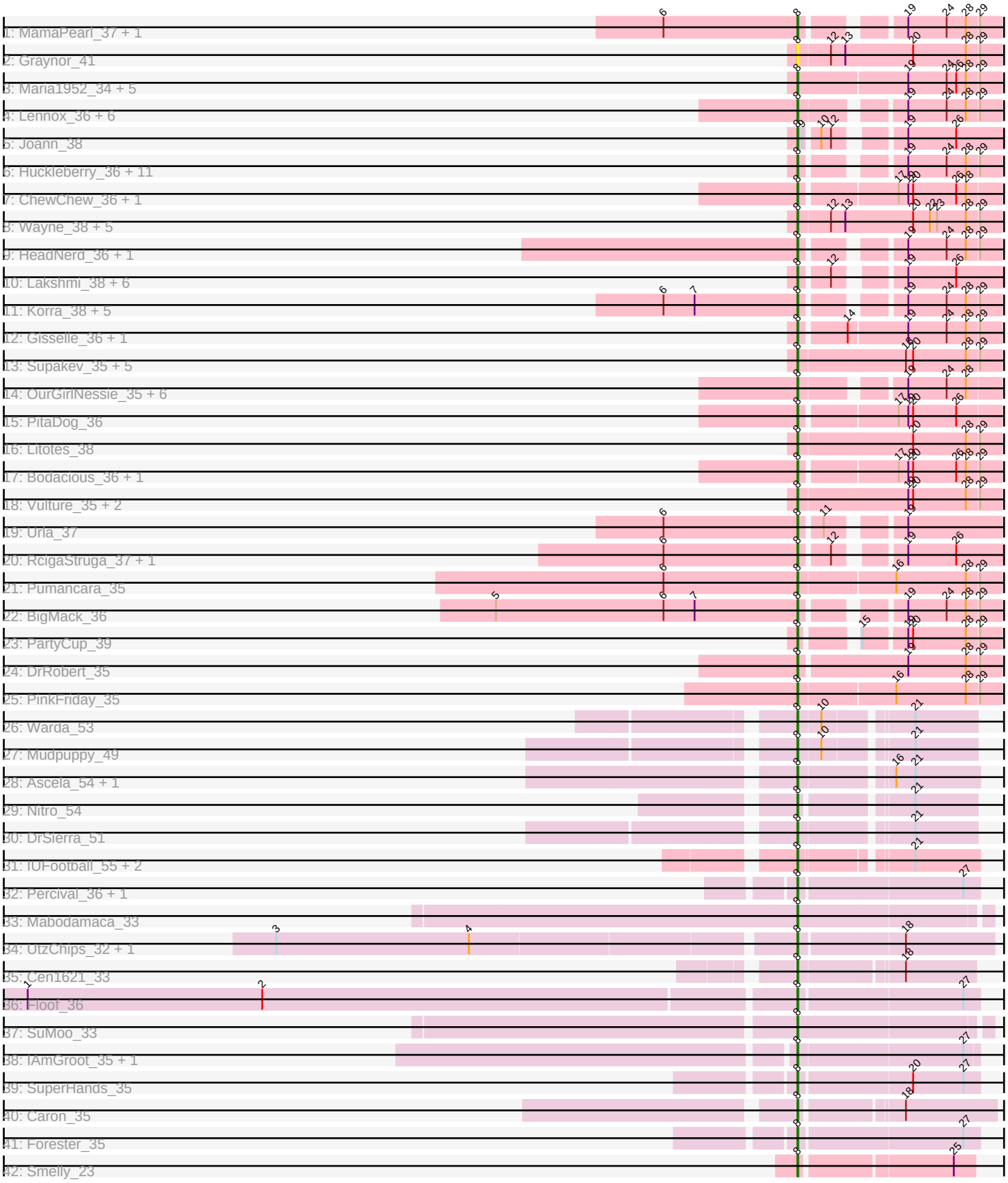
Pham 347445


1: MamaPearl_37 + 1
2: Graynor_41
3: Maria1952_34 + 5
4: Lennox_36 + 6
5: Joann_38
6: Huckleberry_36 + 11
7: ChewChew_36 + 1
8: Wayne_38 + 5
9: HeadNerd_36 + 1
10: Lakshmi_38 + 6
11: Korra_38 + 5
12: Gisselle_36 + 1
13: Supakev_35 + 5
14: OurGirlNessie_35 + 6
15: PitaDog_36
16: Litotes_38
17: Bodacious_36 + 1
18: Vulture_35 + 2
19: Orla_37
20: RcigaStruga_37 + 1
21: Pumancara_35
22: BigMack_36
23: PartyCup_39
24: DrRobert_35
25: PinkFriday_35
26: Warda_53
27: Mudpuppy_49
28: Ascela_54 + 1
29: Nitro_54
30: DrSierra_51
31: IUFootball_55 + 2
32: Percival_36 + 1
33: Mabodamaca_33
34: UtzChips_32 + 1
35: Cen1621_33
36: Hoof_36
37: SuMoo_33
38: IAmGroot_35 + 1
39: SuperHands_35
40: Caron_35
41: Forester_35
42: Smelly_23

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 347445 Report

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

Pham number 347445 has 105 members, 2 are drafts.

Phages represented in each track:
• Track 1 : MamaPearl_37, EstebanJulior_37
• Track 2 : Graynor_41
• Track 3 : Maria1952_34, Daiboju_35, Temper16_35, Herb_35, Sergei_35, KingBob_35
• Track 4 : Lennox_36, MeganNoll_38, Jumboset_39, MrGloopy_39, Savage2526_39, RAP15_39, Christian_36
• Track 5 : Joann_38
• Track 6 : Huckleberry_36, Potatoes_38, Glenn_39, Carpal_38, Moki_36, Preamble_36, Riverdale_39, Cholula_38, Vallejo_39, BrotherBLo_38, Kittykat_37, Immaculata_38
• Track 7 : ChewChew_36, Lucy_36
• Track 8 : Wayne_38, CallieOMalley_38, AppleCider_38, Canowicakte_38, Suppi_38, MrBoss_40
• Track 9 : HeadNerd_36, Bennie_36
• Track 10 : Lakshmi_38, GreenHearts_38, Greenhouse_39, Oxynfrius_38, Misaeng_37, Albanese_38, Nubia_38
• Track 11 : Korra_38, Fluke_39, Zorro_39, Wawa_38, Dino_39, Scuttle_38
• Track 12 : Gisselle_36, DreamTeam_36
• Track 13 : Supakev_35, AustinPowers_35, Eunoia_35, Riovina_35, OMalley_35, Aledel_35
• Track 14 : OurGirlNessie_35, WonderBoy_35, Pterodactyl_36, Makoto_36, CristinaYang_36, Lasagna_35, LilStuart_36
• Track 15 : PitaDog_36
• Track 16 : Litotes_38
• Track 17 : Bodacious_36, Nancia_36
• Track 18 : Vulture_35, HunterDalle_35, Chridison_34
• Track 19 : Urla_37
• Track 20 : RcigaStruga_37, Huntingdon_37
• Track 21 : Pumancara_35
• Track 22 : BigMack_36
• Track 23 : PartyCup_39
• Track 24 : DrRobert_35
• Track 25 : PinkFriday_35
• Track 26 : Warda_53
• Track 27 : Mudpuppy_49
• Track 28 : Ascela_54, Iter_54
• Track 29 : Nitro_54

• Track 30 : DrSierra_51
• Track 31 : IUFootball_55, Liebe_54, Maureen_54
• Track 32 : Percival_36, Gretchen_36
• Track 33 : Mabodamaca_33
• Track 34 : UtzChips_32, Barnstormer_32
• Track 35 : Cen1621_33
• Track 36 : Floof_36
• Track 37 : SuMoo_33
• Track 38 : IAmGroot_35, GardenState_35
• Track 39 : SuperHands_35
• Track 40 : Caron_35
• Track 41 : Forester_35
• Track 42 : Smelly_23

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

The start number called the most often in the published annotations is 8, it was called in 103 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_38, Aledel_35, AppleCider_38, Ascela_54, AustinPowers_35, Barnstormer_32, Bennie_36, BigMack_36, Bodacious_36, BrotherBLo_38, CallieOMalley_38, Canowicakte_38, Caron_35, Carpal_38, Cen1621_33, ChewChew_36, Cholula_38, Chridison_34, Christian_36, CristinaYang_36, Daiboju_35, Dino_39, DrRobert_35, DrSierra_51, DreamTeam_36, EstebanJulior_37, Eunoia_35, Floof_36, Fluke_39, Forester_35, GardenState_35, Gisselle_36, Glenn_39, Graynor_41, GreenHearts_38, Greenhouse_39, Gretchen_36, HeadNerd_36, Herb_35, Huckleberry_36, HunterDalle_35, Huntingdon_37, IAmGroot_35, IUFootball_55, Immaculata_38, Iter_54, Joann_38, Jumboset_39, KingBob_35, Kittykat_37, Korra_38, Lakshmi_38, Lasagna_35, Lennox_36, Liebe_54, LilStuart_36, Litotes_38, Lucy_36, Mabodamaca_33, Makoto_36, MamaPearl_37, Maria1952_34, Maureen_54, MeganNoll_38, Misaeng_37, Moki_36, MrBoss_40, MrGloopy_39, Mudpuppy_49, Nancia_36, Nitro_54, Nubia_38, OMalley_35, OurGirlNessie_35, Oxynfrius_38, PartyCup_39, Percival_36, PinkFriday_35, PitaDog_36, Potatoes_38, Preamble_36, Pterodactyl_36, Pumancara_35, RAP15_39, RcigaStruga_37, Riovina_35, Riverdale_39, Savage2526_39, Scuttle_38, Sergei_35, Smelly_23, SuMoo_33, Supakev_35, SuperHands_35, Suppi_38, Temper16_35, Urla_37, UtzChips_32, Vallejo_39, Vulture_35, Warda_53, Wawa_38, Wayne_38, WonderBoy_35, Zorro_39,

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

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

Summary by start number:

Start 8:
• Found in 105 of 105 (100.0%) of genes in pham

• Manual Annotations of this start: 103 of 103
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_38 (AK), Aledel_35 (AK), AppleCider_38 (AK), Ascela_54 (AZ1), AustinPowers_35 (AK), Barnstormer_32 (EH), Bennie_36 (AK), BigMack_36 (AK), Bodacious_36 (AK), BrotherBLo_38 (AK), CallieOMalley_38 (AK), Canowicakte_38 (AK), Caron_35 (EH), Carpal_38 (AK), Cen1621_33 (EH), ChewChew_36 (AK), Cholula_38 (AK), Chridison_34 (AK), Christian_36 (AK), CristinaYang_36 (AK), Daiboju_35 (AK), Dino_39 (AK), DrRobert_35 (AK), DrSierra_51 (AZ1), DreamTeam_36 (AK), EstebanJulior_37 (AK), Eunoia_35 (AK), Floof_36 (EH), Fluke_39 (AK), Forester_35 (EH), GardenState_35 (EH), Gisselle_36 (AK), Glenn_39 (AK), Graynor_41 (AK), GreenHearts_38 (AK), Greenhouse_39 (AK), Gretchen_36 (EH), HeadNerd_36 (AK), Herb_35 (AK), Huckleberry_36 (AK), HunterDalle_35 (AK), Huntingdon_37 (AK), IAmGroot_35 (EH), IUFootball_55 (AZ2), Immaculata_38 (AK), Iter_54 (AZ1), Joann_38 (AK), Jumboset_39 (AK), KingBob_35 (AK), Kittykat_37 (AK), Korra_38 (AK), Lakshmi_38 (AK), Lasagna_35 (AK), Lennox_36 (AK), Liebe_54 (AZ2), LilStuart_36 (AK), Litotes_38 (AK), Lucy_36 (AK), Mabodamaca_33 (EH), Makoto_36 (AK), MamaPearl_37 (AK), Maria1952_34 (AK), Maureen_54 (AZ2), MeganNoll_38 (AK), Misaeng_37 (AK), Moki_36 (AK), MrBoss_40 (AK), MrGloopy_39 (AK), Mudpuppy_49 (AZ1), Nancia_36 (AK), Nitro_54 (AZ1), Nubia_38 (AK), OMalley_35 (AK), OurGirlNessie_35 (AK), Oxynfrius_38 (AK), PartyCup_39 (AK), Percival_36 (EH), PinkFriday_35 (AK), PitaDog_36 (AK), Potatoes_38 (AK), Preamble_36 (AK), Pterodactyl_36 (AK), Pumancara_35 (AK), RAP15_39 (AK), RcigaStruga_37 (AK), Riovina_35 (AK), Riverdale_39 (AK), Savage2526_39 (AK), Scuttle_38 (AK), Sergei_35 (AK), Smelly_23 (GK), SuMoo_33 (EH), Supakev_35 (AK), SuperHands_35 (EH), Suppi_38 (AK), Temper16_35 (AK), Urla_37 (AK), UtzChips_32 (EH), Vallejo_39 (AK), Vulture_35 (AK), Warda_53 (AZ1), Wawa_38 (AK), Wayne_38 (AK), WonderBoy_35 (AK), Zorro_39 (AK),

Summary by clusters:

There are 5 clusters represented in this pham: AZ1, AK, AZ2, GK, EH,

Info for manual annotations of cluster AK:
•Start number 8 was manually annotated 80 times for cluster AK.

Info for manual annotations of cluster AZ1:
•Start number 8 was manually annotated 6 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 8 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster EH:
•Start number 8 was manually annotated 13 times for cluster EH.

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

Gene Information:

Gene: Albanese_38 Start: 27081, Stop: 27317, Start Num: 8

Candidate Starts for Albanese_38:
(Start: 8 @27081 has 103 MA's), (12, 27114), (19, 27180), (26, 27240),

Gene: Aledel_35 Start: 26376, Stop: 26621, Start Num: 8
Candidate Starts for Aledel_35:
(Start: 8 @26376 has 103 MA's), (18, 26505), (20, 26514), (28, 26580), (29, 26595),

Gene: AppleCider_38 Start: 26781, Stop: 27026, Start Num: 8
Candidate Starts for AppleCider_38:
(Start: 8 @26781 has 103 MA's), (12, 26820), (13, 26838), (20, 26919), (22, 26940), (23, 26949), (28, 26985), (29, 27000),

Gene: Ascela_54 Start: 38184, Stop: 38390, Start Num: 8
Candidate Starts for Ascela_54:
(Start: 8 @38184 has 103 MA's), (16, 38286), (21, 38310),

Gene: AustinPowers_35 Start: 26374, Stop: 26619, Start Num: 8
Candidate Starts for AustinPowers_35:
(Start: 8 @26374 has 103 MA's), (18, 26503), (20, 26512), (28, 26578), (29, 26593),

Gene: Barnstormer_32 Start: 23785, Stop: 24018, Start Num: 8
Candidate Starts for Barnstormer_32:
(3, 23161), (4, 23401), (Start: 8 @23785 has 103 MA's), (18, 23908),

Gene: Bennie_36 Start: 25580, Stop: 25792, Start Num: 8
Candidate Starts for Bennie_36:
(Start: 8 @25580 has 103 MA's), (19, 25679), (24, 25727), (28, 25751), (29, 25766),

Gene: BigMack_36 Start: 25677, Stop: 25889, Start Num: 8
Candidate Starts for BigMack_36:
(5, 25299), (6, 25509), (7, 25548), (Start: 8 @25677 has 103 MA's), (19, 25776), (24, 25824), (28, 25848), (29, 25863),

Gene: Bodacious_36 Start: 25606, Stop: 25845, Start Num: 8
Candidate Starts for Bodacious_36:
(Start: 8 @25606 has 103 MA's), (17, 25720), (19, 25732), (20, 25738), (26, 25792), (28, 25804), (29, 25819),

Gene: BrotherBLo_38 Start: 26798, Stop: 27010, Start Num: 8
Candidate Starts for BrotherBLo_38:
(Start: 8 @26798 has 103 MA's), (19, 26897), (24, 26945), (28, 26969), (29, 26984),

Gene: CallieOMalley_38 Start: 26781, Stop: 27026, Start Num: 8
Candidate Starts for CallieOMalley_38:
(Start: 8 @26781 has 103 MA's), (12, 26820), (13, 26838), (20, 26919), (22, 26940), (23, 26949), (28, 26985), (29, 27000),

Gene: Canowicakte_38 Start: 26816, Stop: 27061, Start Num: 8
Candidate Starts for Canowicakte_38:
(Start: 8 @26816 has 103 MA's), (12, 26855), (13, 26873), (20, 26954), (22, 26975), (23, 26984), (28, 27020), (29, 27035),

Gene: Caron_35 Start: 24264, Stop: 24491, Start Num: 8

Candidate Starts for Caron_35:
(Start: 8 @24264 has 103 MA's), (18, 24378),

Gene: Carpal_38 Start: 26778, Stop: 26990, Start Num: 8
Candidate Starts for Carpal_38:
(Start: 8 @26778 has 103 MA's), (19, 26877), (24, 26925), (28, 26949), (29, 26964),

Gene: Cen1621_33 Start: 23276, Stop: 23482, Start Num: 8
Candidate Starts for Cen1621_33:
(Start: 8 @23276 has 103 MA's), (18, 23396),

Gene: ChewChew_36 Start: 25601, Stop: 25840, Start Num: 8
Candidate Starts for ChewChew_36:
(Start: 8 @25601 has 103 MA's), (17, 25715), (19, 25727), (20, 25733), (26, 25787), (28, 25799),

Gene: Cholula_38 Start: 26824, Stop: 27036, Start Num: 8
Candidate Starts for Cholula_38:
(Start: 8 @26824 has 103 MA's), (19, 26923), (24, 26971), (28, 26995), (29, 27010),

Gene: Chridison_34 Start: 26344, Stop: 26589, Start Num: 8
Candidate Starts for Chridison_34:
(Start: 8 @26344 has 103 MA's), (19, 26476), (20, 26482), (28, 26548), (29, 26563),

Gene: Christian_36 Start: 25612, Stop: 25833, Start Num: 8
Candidate Starts for Christian_36:
(Start: 8 @25612 has 103 MA's), (19, 25720), (24, 25768), (28, 25792), (29, 25807),

Gene: CristinaYang_36 Start: 25615, Stop: 25836, Start Num: 8
Candidate Starts for CristinaYang_36:
(Start: 8 @25615 has 103 MA's), (19, 25723), (24, 25771), (28, 25795),

Gene: Daiboju_35 Start: 26410, Stop: 26658, Start Num: 8
Candidate Starts for Daiboju_35:
(Start: 8 @26410 has 103 MA's), (19, 26545), (24, 26593), (26, 26605), (28, 26617), (29, 26632),

Gene: Dino_39 Start: 26925, Stop: 27137, Start Num: 8
Candidate Starts for Dino_39:
(6, 26757), (7, 26796), (Start: 8 @26925 has 103 MA's), (19, 27024), (24, 27072), (28, 27096), (29, 27111),

Gene: DrRobert_35 Start: 25374, Stop: 25616, Start Num: 8
Candidate Starts for DrRobert_35:
(Start: 8 @25374 has 103 MA's), (19, 25503), (28, 25575), (29, 25590),

Gene: DrSierra_51 Start: 36255, Stop: 36458, Start Num: 8
Candidate Starts for DrSierra_51:
(Start: 8 @36255 has 103 MA's), (21, 36381),

Gene: DreamTeam_36 Start: 25704, Stop: 25943, Start Num: 8
Candidate Starts for DreamTeam_36:
(Start: 8 @25704 has 103 MA's), (14, 25758), (19, 25830), (24, 25878), (28, 25902), (29, 25917),

Gene: EstebanJulior_37 Start: 26761, Stop: 26973, Start Num: 8

Candidate Starts for EstebanJulior_37:
(6, 26593), (Start: 8 @26761 has 103 MA's), (19, 26860), (24, 26908), (28, 26932), (29, 26947),

Gene: Eunoia_35 Start: 26376, Stop: 26621, Start Num: 8
Candidate Starts for Eunoia_35:
(Start: 8 @26376 has 103 MA's), (18, 26505), (20, 26514), (28, 26580), (29, 26595),

Gene: Floof_36 Start: 25209, Stop: 25427, Start Num: 8
Candidate Starts for Floof_36:
(1, 24261), (2, 24555), (Start: 8 @25209 has 103 MA's), (27, 25407),

Gene: Fluke_39 Start: 27041, Stop: 27253, Start Num: 8
Candidate Starts for Fluke_39:
(6, 26873), (7, 26912), (Start: 8 @27041 has 103 MA's), (19, 27140), (24, 27188), (28, 27212), (29, 27227),

Gene: Forester_35 Start: 26635, Stop: 26853, Start Num: 8
Candidate Starts for Forester_35:
(Start: 8 @26635 has 103 MA's), (27, 26833),

Gene: GardenState_35 Start: 24724, Stop: 24942, Start Num: 8
Candidate Starts for GardenState_35:
(Start: 8 @24724 has 103 MA's), (27, 24925),

Gene: Gisselle_36 Start: 25704, Stop: 25943, Start Num: 8
Candidate Starts for Gisselle_36:
(Start: 8 @25704 has 103 MA's), (14, 25758), (19, 25830), (24, 25878), (28, 25902), (29, 25917),

Gene: Glenn_39 Start: 27032, Stop: 27244, Start Num: 8
Candidate Starts for Glenn_39:
(Start: 8 @27032 has 103 MA's), (19, 27131), (24, 27179), (28, 27203), (29, 27218),

Gene: Graynor_41 Start: 26802, Stop: 27047, Start Num: 8
Candidate Starts for Graynor_41:
(Start: 8 @26802 has 103 MA's), (12, 26841), (13, 26859), (20, 26940), (28, 27006), (29, 27021),

Gene: GreenHearts_38 Start: 27176, Stop: 27412, Start Num: 8
Candidate Starts for GreenHearts_38:
(Start: 8 @27176 has 103 MA's), (12, 27209), (19, 27275), (26, 27335),

Gene: Greenhouse_39 Start: 27089, Stop: 27325, Start Num: 8
Candidate Starts for Greenhouse_39:
(Start: 8 @27089 has 103 MA's), (12, 27122), (19, 27188), (26, 27248),

Gene: Gretchen_36 Start: 26317, Stop: 26535, Start Num: 8
Candidate Starts for Gretchen_36:
(Start: 8 @26317 has 103 MA's), (27, 26515),

Gene: HeadNerd_36 Start: 25580, Stop: 25792, Start Num: 8
Candidate Starts for HeadNerd_36:
(Start: 8 @25580 has 103 MA's), (19, 25679), (24, 25727), (28, 25751), (29, 25766),

Gene: Herb_35 Start: 26409, Stop: 26657, Start Num: 8

Candidate Starts for Herb_35:
(Start: 8 @26409 has 103 MA's), (19, 26544), (24, 26592), (26, 26604), (28, 26616), (29, 26631),

Gene: Huckleberry_36 Start: 25563, Stop: 25775, Start Num: 8
Candidate Starts for Huckleberry_36:
(Start: 8 @25563 has 103 MA's), (19, 25662), (24, 25710), (28, 25734), (29, 25749),

Gene: HunterDalle_35 Start: 26343, Stop: 26588, Start Num: 8
Candidate Starts for HunterDalle_35:
(Start: 8 @26343 has 103 MA's), (19, 26475), (20, 26481), (28, 26547), (29, 26562),

Gene: Huntingdon_37 Start: 26819, Stop: 27055, Start Num: 8
Candidate Starts for Huntingdon_37:
(6, 26651), (Start: 8 @26819 has 103 MA's), (12, 26852), (19, 26918), (26, 26978),

Gene: IAmGroot_35 Start: 25389, Stop: 25607, Start Num: 8
Candidate Starts for IAmGroot_35:
(Start: 8 @25389 has 103 MA's), (27, 25590),

Gene: IUFootball_55 Start: 39610, Stop: 39810, Start Num: 8
Candidate Starts for IUFootball_55:
(Start: 8 @39610 has 103 MA's), (21, 39730),

Gene: Immaculata_38 Start: 26823, Stop: 27035, Start Num: 8
Candidate Starts for Immaculata_38:
(Start: 8 @26823 has 103 MA's), (19, 26922), (24, 26970), (28, 26994), (29, 27009),

Gene: Iter_54 Start: 38176, Stop: 38382, Start Num: 8
Candidate Starts for Iter_54:
(Start: 8 @38176 has 103 MA's), (16, 38278), (21, 38302),

Gene: Joann_38 Start: 27052, Stop: 27285, Start Num: 8
Candidate Starts for Joann_38:
(Start: 8 @27052 has 103 MA's), (9, 27058), (10, 27073), (12, 27085), (19, 27151), (26, 27211),

Gene: Jumboset_39 Start: 26907, Stop: 27152, Start Num: 8
Candidate Starts for Jumboset_39:
(Start: 8 @26907 has 103 MA's), (19, 27039), (24, 27087), (28, 27111), (29, 27126),

Gene: KingBob_35 Start: 26410, Stop: 26658, Start Num: 8
Candidate Starts for KingBob_35:
(Start: 8 @26410 has 103 MA's), (19, 26545), (24, 26593), (26, 26605), (28, 26617), (29, 26632),

Gene: Kittykat_37 Start: 25831, Stop: 26043, Start Num: 8
Candidate Starts for Kittykat_37:
(Start: 8 @25831 has 103 MA's), (19, 25930), (24, 25978), (28, 26002), (29, 26017),

Gene: Korra_38 Start: 26777, Stop: 26989, Start Num: 8
Candidate Starts for Korra_38:
(6, 26609), (7, 26648), (Start: 8 @26777 has 103 MA's), (19, 26876), (24, 26924), (28, 26948), (29, 26963),

Gene: Lakshmi_38 Start: 27055, Stop: 27291, Start Num: 8

Candidate Starts for Lakshmi_38:
(Start: 8 @27055 has 103 MA's), (12, 27088), (19, 27154), (26, 27214),

Gene: Lasagna_35 Start: 25389, Stop: 25610, Start Num: 8
Candidate Starts for Lasagna_35:
(Start: 8 @25389 has 103 MA's), (19, 25497), (24, 25545), (28, 25569),

Gene: Lennox_36 Start: 25600, Stop: 25821, Start Num: 8
Candidate Starts for Lennox_36:
(Start: 8 @25600 has 103 MA's), (19, 25708), (24, 25756), (28, 25780), (29, 25795),

Gene: Liebe_54 Start: 39610, Stop: 39810, Start Num: 8
Candidate Starts for Liebe_54:
(Start: 8 @39610 has 103 MA's), (21, 39730),

Gene: LilStuart_36 Start: 25603, Stop: 25824, Start Num: 8
Candidate Starts for LilStuart_36:
(Start: 8 @25603 has 103 MA's), (19, 25711), (24, 25759), (28, 25783),

Gene: Litotes_38 Start: 26766, Stop: 27014, Start Num: 8
Candidate Starts for Litotes_38:
(Start: 8 @26766 has 103 MA's), (20, 26907), (28, 26973), (29, 26988),

Gene: Lucy_36 Start: 25582, Stop: 25821, Start Num: 8
Candidate Starts for Lucy_36:
(Start: 8 @25582 has 103 MA's), (17, 25696), (19, 25708), (20, 25714), (26, 25768), (28, 25780),

Gene: Mabodamaca_33 Start: 24562, Stop: 24792, Start Num: 8
Candidate Starts for Mabodamaca_33:
(Start: 8 @24562 has 103 MA's),

Gene: Makoto_36 Start: 25611, Stop: 25832, Start Num: 8
Candidate Starts for Makoto_36:
(Start: 8 @25611 has 103 MA's), (19, 25719), (24, 25767), (28, 25791),

Gene: MamaPearl_37 Start: 26761, Stop: 26973, Start Num: 8
Candidate Starts for MamaPearl_37:
(6, 26593), (Start: 8 @26761 has 103 MA's), (19, 26860), (24, 26908), (28, 26932), (29, 26947),

Gene: Maria1952_34 Start: 26409, Stop: 26657, Start Num: 8
Candidate Starts for Maria1952_34:
(Start: 8 @26409 has 103 MA's), (19, 26544), (24, 26592), (26, 26604), (28, 26616), (29, 26631),

Gene: Maureen_54 Start: 39609, Stop: 39809, Start Num: 8
Candidate Starts for Maureen_54:
(Start: 8 @39609 has 103 MA's), (21, 39729),

Gene: MeganNoll_38 Start: 26964, Stop: 27209, Start Num: 8
Candidate Starts for MeganNoll_38:
(Start: 8 @26964 has 103 MA's), (19, 27096), (24, 27144), (28, 27168), (29, 27183),

Gene: Misaeng_37 Start: 27052, Stop: 27288, Start Num: 8
Candidate Starts for Misaeng_37:

(Start: 8 @27052 has 103 MA's), (12, 27085), (19, 27151), (26, 27211),

Gene: Moki_36 Start: 25725, Stop: 25937, Start Num: 8
Candidate Starts for Moki_36:
(Start: 8 @25725 has 103 MA's), (19, 25824), (24, 25872), (28, 25896), (29, 25911),

Gene: MrBoss_40 Start: 26766, Stop: 27011, Start Num: 8
Candidate Starts for MrBoss_40:
(Start: 8 @26766 has 103 MA's), (12, 26805), (13, 26823), (20, 26904), (22, 26925), (23, 26934), (28, 26970), (29, 26985),

Gene: MrGloopy_39 Start: 26893, Stop: 27138, Start Num: 8
Candidate Starts for MrGloopy_39:
(Start: 8 @26893 has 103 MA's), (19, 27025), (24, 27073), (28, 27097), (29, 27112),

Gene: Mudpuppy_49 Start: 37133, Stop: 37333, Start Num: 8
Candidate Starts for Mudpuppy_49:
(Start: 8 @37133 has 103 MA's), (10, 37160), (21, 37256),

Gene: Nancia_36 Start: 25606, Stop: 25845, Start Num: 8
Candidate Starts for Nancia_36:
(Start: 8 @25606 has 103 MA's), (17, 25720), (19, 25732), (20, 25738), (26, 25792), (28, 25804), (29, 25819),

Gene: Nitro_54 Start: 39215, Stop: 39412, Start Num: 8
Candidate Starts for Nitro_54:
(Start: 8 @39215 has 103 MA's), (21, 39335),

Gene: Nubia_38 Start: 27006, Stop: 27242, Start Num: 8
Candidate Starts for Nubia_38:
(Start: 8 @27006 has 103 MA's), (12, 27039), (19, 27105), (26, 27165),

Gene: OMalley_35 Start: 26376, Stop: 26621, Start Num: 8
Candidate Starts for OMalley_35:
(Start: 8 @26376 has 103 MA's), (18, 26505), (20, 26514), (28, 26580), (29, 26595),

Gene: OurGirlNessie_35 Start: 25355, Stop: 25576, Start Num: 8
Candidate Starts for OurGirlNessie_35:
(Start: 8 @25355 has 103 MA's), (19, 25463), (24, 25511), (28, 25535),

Gene: Oxynfrius_38 Start: 27033, Stop: 27269, Start Num: 8
Candidate Starts for Oxynfrius_38:
(Start: 8 @27033 has 103 MA's), (12, 27066), (19, 27132), (26, 27192),

Gene: PartyCup_39 Start: 27013, Stop: 27228, Start Num: 8
Candidate Starts for PartyCup_39:
(Start: 8 @27013 has 103 MA's), (15, 27067), (19, 27115), (20, 27121), (28, 27187), (29, 27202),

Gene: Percival_36 Start: 26151, Stop: 26369, Start Num: 8
Candidate Starts for Percival_36:
(Start: 8 @26151 has 103 MA's), (27, 26349),

Gene: PinkFriday_35 Start: 25525, Stop: 25770, Start Num: 8

Candidate Starts for PinkFriday_35:
(Start: 8 @25525 has 103 MA's), (16, 25642), (28, 25729), (29, 25744),

Gene: PitaDog_36 Start: 25594, Stop: 25833, Start Num: 8
Candidate Starts for PitaDog_36:
(Start: 8 @25594 has 103 MA's), (17, 25708), (19, 25720), (20, 25726), (26, 25780),

Gene: Potatoes_38 Start: 26824, Stop: 27036, Start Num: 8
Candidate Starts for Potatoes_38:
(Start: 8 @26824 has 103 MA's), (19, 26923), (24, 26971), (28, 26995), (29, 27010),

Gene: Preamble_36 Start: 25688, Stop: 25900, Start Num: 8
Candidate Starts for Preamble_36:
(Start: 8 @25688 has 103 MA's), (19, 25787), (24, 25835), (28, 25859), (29, 25874),

Gene: Pterodactyl_36 Start: 25592, Stop: 25813, Start Num: 8
Candidate Starts for Pterodactyl_36:
(Start: 8 @25592 has 103 MA's), (19, 25700), (24, 25748), (28, 25772),

Gene: Pumancara_35 Start: 25437, Stop: 25682, Start Num: 8
Candidate Starts for Pumancara_35:
(6, 25269), (Start: 8 @25437 has 103 MA's), (16, 25554), (28, 25641), (29, 25656),

Gene: RAP15_39 Start: 26964, Stop: 27209, Start Num: 8
Candidate Starts for RAP15_39:
(Start: 8 @26964 has 103 MA's), (19, 27096), (24, 27144), (28, 27168), (29, 27183),

Gene: RcigaStruga_37 Start: 26819, Stop: 27055, Start Num: 8
Candidate Starts for RcigaStruga_37:
(6, 26651), (Start: 8 @26819 has 103 MA's), (12, 26852), (19, 26918), (26, 26978),

Gene: Riovina_35 Start: 26376, Stop: 26621, Start Num: 8
Candidate Starts for Riovina_35:
(Start: 8 @26376 has 103 MA's), (18, 26505), (20, 26514), (28, 26580), (29, 26595),

Gene: Riverdale_39 Start: 26962, Stop: 27174, Start Num: 8
Candidate Starts for Riverdale_39:
(Start: 8 @26962 has 103 MA's), (19, 27061), (24, 27109), (28, 27133), (29, 27148),

Gene: Savage2526_39 Start: 26958, Stop: 27203, Start Num: 8
Candidate Starts for Savage2526_39:
(Start: 8 @26958 has 103 MA's), (19, 27090), (24, 27138), (28, 27162), (29, 27177),

Gene: Scuttle_38 Start: 26951, Stop: 27163, Start Num: 8
Candidate Starts for Scuttle_38:
(6, 26783), (7, 26822), (Start: 8 @26951 has 103 MA's), (19, 27050), (24, 27098), (28, 27122), (29, 27137),

Gene: Sergei_35 Start: 26410, Stop: 26658, Start Num: 8
Candidate Starts for Sergei_35:
(Start: 8 @26410 has 103 MA's), (19, 26545), (24, 26593), (26, 26605), (28, 26617), (29, 26632),

Gene: Smelly_23 Start: 17195, Stop: 17398, Start Num: 8

Candidate Starts for Smelly_23:
(Start: 8 @17195 has 103 MA's), (25, 17372),

Gene: SuMoo_33 Start: 23508, Stop: 23738, Start Num: 8
Candidate Starts for SuMoo_33:
(Start: 8 @23508 has 103 MA's),

Gene: Supakev_35 Start: 26376, Stop: 26621, Start Num: 8
Candidate Starts for Supakev_35:
(Start: 8 @26376 has 103 MA's), (18, 26505), (20, 26514), (28, 26580), (29, 26595),

Gene: SuperHands_35 Start: 26654, Stop: 26872, Start Num: 8
Candidate Starts for SuperHands_35:
(Start: 8 @26654 has 103 MA's), (20, 26789), (27, 26852),

Gene: Suppi_38 Start: 26816, Stop: 27061, Start Num: 8
Candidate Starts for Suppi_38:
(Start: 8 @26816 has 103 MA's), (12, 26855), (13, 26873), (20, 26954), (22, 26975), (23, 26984), (28, 27020), (29, 27035),

Gene: Temper16_35 Start: 26410, Stop: 26658, Start Num: 8
Candidate Starts for Temper16_35:
(Start: 8 @26410 has 103 MA's), (19, 26545), (24, 26593), (26, 26605), (28, 26617), (29, 26632),

Gene: Urla_37 Start: 26775, Stop: 26990, Start Num: 8
Candidate Starts for Urla_37:
(6, 26607), (Start: 8 @26775 has 103 MA's), (11, 26799), (19, 26874),

Gene: UtzChips_32 Start: 23770, Stop: 24003, Start Num: 8
Candidate Starts for UtzChips_32:
(3, 23146), (4, 23386), (Start: 8 @23770 has 103 MA's), (18, 23893),

Gene: Vallejo_39 Start: 26965, Stop: 27177, Start Num: 8
Candidate Starts for Vallejo_39:
(Start: 8 @26965 has 103 MA's), (19, 27064), (24, 27112), (28, 27136), (29, 27151),

Gene: Vulture_35 Start: 26343, Stop: 26588, Start Num: 8
Candidate Starts for Vulture_35:
(Start: 8 @26343 has 103 MA's), (19, 26475), (20, 26481), (28, 26547), (29, 26562),

Gene: Warda_53 Start: 37573, Stop: 37773, Start Num: 8
Candidate Starts for Warda_53:
(Start: 8 @37573 has 103 MA's), (10, 37600), (21, 37696),

Gene: Wawa_38 Start: 26798, Stop: 27010, Start Num: 8
Candidate Starts for Wawa_38:
(6, 26630), (7, 26669), (Start: 8 @26798 has 103 MA's), (19, 26897), (24, 26945), (28, 26969), (29, 26984),

Gene: Wayne_38 Start: 26862, Stop: 27107, Start Num: 8
Candidate Starts for Wayne_38:
(Start: 8 @26862 has 103 MA's), (12, 26901), (13, 26919), (20, 27000), (22, 27021), (23, 27030), (28, 27066), (29, 27081),

Gene: WonderBoy_35 Start: 25584, Stop: 25805, Start Num: 8
Candidate Starts for WonderBoy_35:
(Start: 8 @25584 has 103 MA's), (19, 25692), (24, 25740), (28, 25764),

Gene: Zorro_39 Start: 26925, Stop: 27137, Start Num: 8
Candidate Starts for Zorro_39:
(6, 26757), (7, 26796), (Start: 8 @26925 has 103 MA's), (19, 27024), (24, 27072), (28, 27096), (29, 27111),