Pham 289189

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 289189 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289189 has 130 members, 27 are drafts.

Phages represented in each track:
• Track 1 : JoeDirt_10, Zaria_10, Wyatt2_10, Silverleaf_10, Appletree2_10, AvadaKedavra_10, Rose5_10, Acquire49_10, Tyson_10, LeBron_10, UPIE_10, Halena_10, CicholasNage_10, Enceladus_10, MAckerman_10, Poochiewood_10, DirkDirk_10, OhShagHennessy_10, Wamburgrxpress_10, Calm_10
• Track 2 : Loadrie_10, Underpass_10, OverPar_10, BigCheese_10, LilDestine_10, MkaliMitinis3_10, Faith1_10, Miley16_10, DrSeegs_10, Lewan_10, BobsGarage_10, Sarshaun_10, Wigglewiggle_10, Kahlid_10, Zakai_10, Gabriela_10, Hafay_10, Vetrix_10, Soap141_10, Nicholasp3_10, Crossroads_10, SoJulia_10, Winky_10, Breezona_10, Finemlucis_10, Itos_10, Gardann_10, Rumpelstiltskin_10, Lynnae_10, Wilder_10, Netyap_10
• Track 3 : Bazzle_10, Archie_10, Rossetti_10
• Track 4 : DanBing_9, ZhongYanYuan_9, Tourach_10, Baoshan_9, DHan_10, Claus_10
• Track 5 : GuuelaD_10
• Track 6 : Jubie_11, Bellis_11, TriFive_11, MsGreen_11, Snenia_11, Finnry_11, Moostard_11, Jobypre_11, Nicholas_11, Kingsolomon_11, Red305_11, Clautastrophe_11, Samty_11, Lumos_11
• Track 7 : Ellson_11, Krypton555_11, BourbonZero_10, LiyuLake_11, DuncansLeg_11, MiniMac_11, Lolly9_11, KirDoubleO7_9, MiniLon_11, Whirlwind_12
• Track 8 : BrainDrainer_11, FarmResident_10, Douzhi_10, Sheng711_10, PYPDinur_10, Kropertea_10, ChutneyChips_9, DyoEdafos_11
• Track 9 : Chaser_10, Douge_10, Quby_10
• Track 10 : Bromden_10
• Track 11 : Baudelaire_10, Aegeus_10
• Track 12 : Izel_21, Auspice_20, TyDawg_20, IPhane7_20, KleverKiS_20, Skinny_21, Dulcita_21, Glaske16_21, LilhomieP_19, Bongo_20, PegLeg_20, Bricole_20, SlimJimmy_19, TpudiCK_21, Diminimus_21, FreakyGoo_21
• Track 13 : Reindeer_18
• Track 14 : RoseMarie_20
• Track 15 : Rey_24
• Track 16 : GenevaB15_24, Aziz_24
• Track 17 : MrMagoo_24
• Track 18 : GardenSalsa_24
• Track 19 : Estes_25
• Track 20 : Nanosmite_24
• Track 21 : Cosmo_32, MaryV_32, Wildcat_32, Azrael100_31, EniyanLRS_29
• Track 22 : Kumao_19

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

The start number called the most often in the published annotations is 17, it was called in 78 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acquire49_10, Appletree2_10, Archie_10, AvadaKedavra_10, Azrael100_31, Baoshan_9, Bazzle_10, Bellis_11, BigCheese_10, BobsGarage_10, BourbonZero_10, BrainDrainer_11, Breezona_10, Bromden_10, Calm_10, Chaser_10, ChutneyChips_9, CicholasNage_10, Claus_10, Clautastrophe_11, Cosmo_32, Crossroads_10, DHan_10, DanBing_9, DirkDirk_10, Douge_10, Douzhi_10, DrSeegs_10, DuncansLeg_11, DyoEdafos_11, Ellson_11, Enceladus_10, EniyanLRS_29, Faith1_10, FarmResident_10, Finemlucis_10, Finnry_11, Gabriela_10, Gardann_10, GuuelaD_10, Hafay_10, Halena_10, Itos_10, Jobypre_11, JoeDirt_10, Jubie_11, Kahlid_10, Kingsolomon_11, KirDoubleO7_9, Kropertea_10, Krypton555_11, LeBron_10, Lewan_10, LilDestine_10, LiyuLake_11, Loadrie_10, Lolly9_11, Lumos_11, Lynnae_10, MAckerman_10, MaryV_32, Miley16_10, MiniLon_11, MiniMac_11, MkaliMitinis3_10, Moostard_11, MsGreen_11, Netyap_10, Nicholas_11, Nicholasp3_10, OhShagHennessy_10, OverPar_10, PYPDinur_10, Poochiewood_10, Quby_10, Red305_11, Rose5_10, Rossetti_10, Rumpelstiltskin_10, Samty_11, Sarshaun_10, Sheng711_10, Silverleaf_10, Snenia_11, SoJulia_10, Soap141_10, Tourach_10, TriFive_11, Tyson_10, UPIE_10, Underpass_10, Vetrix_10, Wamburgrxpress_10, Whirlwind_12, Wigglewiggle_10, Wildcat_32, Wilder_10, Winky_10, Wyatt2_10, Zakai_10, Zaria_10, ZhongYanYuan_9,

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

Genes that do not have the "Most Annotated" start:
• Aegeus_10, Auspice_20, Aziz_24, Baudelaire_10, Bongo_20, Bricole_20, Diminimus_21, Dulcita_21, Estes_25, FreakyGoo_21, GardenSalsa_24, GenevaB15_24, Glaske16_21, IPhane7_20, Izel_21, KleverKiS_20, Kumao_19, LilhomieP_19, MrMagoo_24, Nanosmite_24, PegLeg_20, Reindeer_18, Rey_24, RoseMarie_20, Skinny_21, SlimJimmy_19, TpudiCK_21, TyDawg_20,

Summary by start number:

Start 12:
• Found in 28 of 130 (21.5%) of genes in pham
• Manual Annotations of this start: 20 of 103
• Called 78.6% of time when present
• Phage (with cluster) where this start called: Auspice_20 (M1), Aziz_24 (M2), Bongo_20 (M1), Bricole_20 (M1), Diminimus_21 (M1), Dulcita_21 (M1), FreakyGoo_21 (M1), GardenSalsa_24 (M2), GenevaB15_24 (M2), Glaske16_21 (M1), IPhane7_20 (M1), Izel_21 (M1), KleverKiS_20 (M1), Kumao_19 (singleton), LilhomieP_19 (M1), Nanosmite_24 (M3), PegLeg_20 (M1), Reindeer_18 (M1), Skinny_21 (M1), SlimJimmy_19 (M1), TpudiCK_21 (M1), TyDawg_20 (M1),

Start 13:
• Found in 6 of 130 (4.6%) of genes in pham
• Manual Annotations of this start: 3 of 103
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Estes_25 (M2), MrMagoo_24 (M2), Rey_24 (M2),

Start 15:
• Found in 8 of 130 (6.2%) of genes in pham
• Manual Annotations of this start: 2 of 103
• Called 37.5% of time when present
• Phage (with cluster) where this start called: Aegeus_10 (L5), Baudelaire_10 (L5), RoseMarie_20 (M1),

Start 17:
• Found in 102 of 130 (78.5%) of genes in pham
• Manual Annotations of this start: 78 of 103
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acquire49_10 (L1), Appletree2_10 (L1), Archie_10 (L2), AvadaKedavra_10 (L1), Azrael100_31 (V), Baoshan_9 (L2), Bazzle_10 (L2), Bellis_11 (L3), BigCheese_10 (L2), BobsGarage_10 (L2), BourbonZero_10 (L3), BrainDrainer_11 (L4), Breezona_10 (L2), Bromden_10 (L4), Calm_10 (L1), Chaser_10 (L4), ChutneyChips_9 (L4), CicholasNage_10 (L1), Claus_10 (L2), Clautastrophe_11 (L3), Cosmo_32 (V), Crossroads_10 (L2), DHan_10 (L2), DanBing_9 (L2), DirkDirk_10 (L1), Douge_10 (L4), Douzhi_10 (L4), DrSeegs_10 (L2), DuncansLeg_11 (L3), DyoEdafos_11 (L4), Ellson_11 (L3), Enceladus_10 (L1), EniyanLRS_29 (V), Faith1_10 (L2), FarmResident_10 (L4), Finemlucis_10 (L2), Finnry_11 (L3), Gabriela_10 (L2), Gardann_10 (L2), GuuelaD_10 (L2), Hafay_10 (L2), Halena_10 (L1), Itos_10 (L2), Jobypre_11 (L3), JoeDirt_10 (L1), Jubie_11 (L3), Kahlid_10 (L2), Kingsolomon_11 (L3), KirDoubleO7_9 (L3), Kropertea_10 (L4), Krypton555_11 (L3), LeBron_10 (L1), Lewan_10 (L2), LilDestine_10 (L2), LiyuLake_11 (L3), Loadrie_10 (L2), Lolly9_11 (L3), Lumos_11 (L3), Lynnae_10 (L2), MAckerman_10 (L1), MaryV_32 (V), Miley16_10 (L2), MiniLon_11 (L3), MiniMac_11 (L3), MkaliMitinis3_10 (L2), Moostard_11 (L3), MsGreen_11 (L3), Netyap_10 (L2), Nicholas_11 (L3), Nicholasp3_10 (L2), OhShagHennessy_10 (L1), OverPar_10 (L2), PYPDinur_10 (L4), Poochiewood_10 (L1), Quby_10 (L4), Red305_11 (L3), Rose5_10 (L1), Rossetti_10 (L2), Rumpelstiltskin_10 (L2), Samty_11 (L3), Sarshaun_10 (L2), Sheng711_10 (L4), Silverleaf_10 (L1), Snenia_11 (L3), SoJulia_10 (L2), Soap141_10 (L2), Tourach_10 (L2), TriFive_11 (L3), Tyson_10 (L1), UPIE_10 (L1), Underpass_10 (L2), Vetrix_10 (L2), Wamburgrxpress_10 (L1), Whirlwind_12 (L3), Wigglewiggle_10 (L2), Wildcat_32 (V), Wilder_10 (L2), Winky_10 (L2), Wyatt2_10 (L1), Zakai_10 (L2), Zaria_10 (L1), ZhongYanYuan_9 (L2),

Summary by clusters:

There are 10 clusters represented in this pham: V, L1, singleton, L4, L5, L2, L3, M3, M2, M1,

Info for manual annotations of cluster L1:
•Start number 17 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 17 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:
•Start number 17 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 17 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 15 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:
•Start number 12 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 12 was manually annotated 3 times for cluster M2.
•Start number 13 was manually annotated 3 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 12 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:
•Start number 17 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Acquire49_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Acquire49_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Aegeus_10 Start: 7298, Stop: 7678, Start Num: 15
Candidate Starts for Aegeus_10:
(1, 7016), (2, 7109), (3, 7127), (4, 7169), (5, 7178), (7, 7220), (8, 7229), (10, 7259), (11, 7268), (Start: 12 @7271 has 20 MA's), (Start: 15 @7298 has 2 MA's), (22, 7415), (29, 7511), (30, 7517), (33, 7556), (38, 7592), (39, 7595),

Gene: Appletree2_10 Start: 7684, Stop: 8007, Start Num: 17
Candidate Starts for Appletree2_10:
(Start: 17 @7684 has 78 MA's), (30, 7849), (36, 7915), (47, 7987), (48, 7996),

Gene: Archie_10 Start: 7665, Stop: 8003, Start Num: 17
Candidate Starts for Archie_10:
(Start: 17 @7665 has 78 MA's), (30, 7845), (39, 7926), (44, 7971), (45, 7974), (47, 7983), (48, 7992),

Gene: Auspice_20 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for Auspice_20:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: AvadaKedavra_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for AvadaKedavra_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Aziz_24 Start: 12073, Stop: 12441, Start Num: 12
Candidate Starts for Aziz_24:
(6, 12013), (Start: 12 @12073 has 20 MA's), (Start: 13 @12076 has 3 MA's), (Start: 15 @12100 has 2 MA's), (16, 12109), (24, 12211), (32, 12304), (34, 12337), (35, 12340), (40, 12385), (47, 12421),

Gene: Azrael100_31 Start: 14635, Stop: 14976, Start Num: 17
Candidate Starts for Azrael100_31:
(Start: 17 @14635 has 78 MA's), (20, 14665), (22, 14719), (26, 14737), (28, 14770), (32, 14824), (36, 14869), (41, 14920), (42, 14923), (47, 14947),

Gene: Baoshan_9 Start: 7520, Stop: 7858, Start Num: 17
Candidate Starts for Baoshan_9:
(Start: 17 @7520 has 78 MA's), (21, 7598), (30, 7700), (39, 7781), (44, 7826), (45, 7829), (47, 7838), (48, 7847),

Gene: Baudelaire_10 Start: 7298, Stop: 7678, Start Num: 15
Candidate Starts for Baudelaire_10:
(1, 7016), (2, 7109), (3, 7127), (4, 7169), (5, 7178), (7, 7220), (8, 7229), (10, 7259), (11, 7268), (Start: 12 @7271 has 20 MA's), (Start: 15 @7298 has 2 MA's), (22, 7415), (29, 7511), (30, 7517), (33, 7556), (38, 7592), (39, 7595),

Gene: Bazzle_10 Start: 7641, Stop: 7979, Start Num: 17
Candidate Starts for Bazzle_10:
(Start: 17 @7641 has 78 MA's), (30, 7821), (39, 7902), (44, 7947), (45, 7950), (47, 7959), (48, 7968),

Gene: Bellis_11 Start: 7840, Stop: 8178, Start Num: 17
Candidate Starts for Bellis_11:
(Start: 17 @7840 has 78 MA's), (30, 8020), (37, 8089), (44, 8146), (45, 8149), (47, 8158), (48, 8167), (49, 8173),

Gene: BigCheese_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for BigCheese_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: BobsGarage_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for BobsGarage_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Bongo_20 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for Bongo_20:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: BourbonZero_10 Start: 7846, Stop: 8184, Start Num: 17
Candidate Starts for BourbonZero_10:
(Start: 17 @7846 has 78 MA's), (30, 8026), (37, 8095), (44, 8152), (45, 8155), (48, 8173),

Gene: BrainDrainer_11 Start: 7511, Stop: 7849, Start Num: 17
Candidate Starts for BrainDrainer_11:
(Start: 17 @7511 has 78 MA's), (30, 7691), (44, 7817), (45, 7820), (47, 7829), (48, 7838),

Gene: Breezona_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Breezona_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Bricole_20 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for Bricole_20:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: Bromden_10 Start: 7421, Stop: 7759, Start Num: 17
Candidate Starts for Bromden_10:
(Start: 17 @7421 has 78 MA's), (18, 7436), (30, 7601), (44, 7727), (45, 7730), (48, 7748),

Gene: Calm_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for Calm_10:
(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: Chaser_10 Start: 7426, Stop: 7764, Start Num: 17
Candidate Starts for Chaser_10:
(Start: 17 @7426 has 78 MA's), (21, 7504), (30, 7606), (44, 7732), (45, 7735), (47, 7744), (48, 7753),

Gene: ChutneyChips_9 Start: 7414, Stop: 7752, Start Num: 17
Candidate Starts for ChutneyChips_9:
(Start: 17 @7414 has 78 MA's), (30, 7594), (44, 7720), (45, 7723), (47, 7732), (48, 7741),

Gene: CicholasNage_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for CicholasNage_10:
(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: Claus_10 Start: 7700, Stop: 8038, Start Num: 17
Candidate Starts for Claus_10:
(Start: 17 @7700 has 78 MA's), (21, 7778), (30, 7880), (39, 7961), (44, 8006), (45, 8009), (47, 8018), (48, 8027),

Gene: Clautastrophe_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Clautastrophe_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171), (49, 8177),

Gene: Cosmo_32 Start: 14642, Stop: 14983, Start Num: 17
Candidate Starts for Cosmo_32:
(Start: 17 @14642 has 78 MA's), (20, 14672), (22, 14726), (26, 14744), (28, 14777), (32, 14831), (36, 14876), (41, 14927), (42, 14930), (47, 14954),

Gene: Crossroads_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Crossroads_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: DHan_10 Start: 7636, Stop: 7974, Start Num: 17
Candidate Starts for DHan_10:
(Start: 17 @7636 has 78 MA's), (21, 7714), (30, 7816), (39, 7897), (44, 7942), (45, 7945), (47, 7954), (48, 7963),

Gene: DanBing_9 Start: 7519, Stop: 7857, Start Num: 17
Candidate Starts for DanBing_9:
(Start: 17 @7519 has 78 MA's), (21, 7597), (30, 7699), (39, 7780), (44, 7825), (45, 7828), (47, 7837), (48, 7846),

Gene: Diminimus_21 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for Diminimus_21:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: DirkDirk_10 Start: 7712, Stop: 8035, Start Num: 17
Candidate Starts for DirkDirk_10:
(Start: 17 @7712 has 78 MA's), (30, 7877), (36, 7943), (47, 8015), (48, 8024),

Gene: Douge_10 Start: 7372, Stop: 7710, Start Num: 17
Candidate Starts for Douge_10:
(Start: 17 @7372 has 78 MA's), (21, 7450), (30, 7552), (44, 7678), (45, 7681), (47, 7690), (48, 7699),

Gene: Douzhi_10 Start: 7372, Stop: 7710, Start Num: 17
Candidate Starts for Douzhi_10:
(Start: 17 @7372 has 78 MA's), (30, 7552), (44, 7678), (45, 7681), (47, 7690), (48, 7699),

Gene: DrSeegs_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for DrSeegs_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Dulcita_21 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for Dulcita_21:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: DuncansLeg_11 Start: 7848, Stop: 8186, Start Num: 17
Candidate Starts for DuncansLeg_11:
(Start: 17 @7848 has 78 MA's), (30, 8028), (37, 8097), (44, 8154), (45, 8157), (48, 8175),

Gene: DyoEdafos_11 Start: 7582, Stop: 7920, Start Num: 17
Candidate Starts for DyoEdafos_11:
(Start: 17 @7582 has 78 MA's), (30, 7762), (44, 7888), (45, 7891), (47, 7900), (48, 7909),

Gene: Ellson_11 Start: 7856, Stop: 8194, Start Num: 17
Candidate Starts for Ellson_11:
(Start: 17 @7856 has 78 MA's), (30, 8036), (37, 8105), (44, 8162), (45, 8165), (48, 8183),

Gene: Enceladus_10 Start: 7712, Stop: 8035, Start Num: 17
Candidate Starts for Enceladus_10:
(Start: 17 @7712 has 78 MA's), (30, 7877), (36, 7943), (47, 8015), (48, 8024),

Gene: EniyanLRS_29 Start: 14336, Stop: 14677, Start Num: 17
Candidate Starts for EniyanLRS_29:
(Start: 17 @14336 has 78 MA's), (20, 14366), (22, 14420), (26, 14438), (28, 14471), (32, 14525), (36, 14570), (41, 14621), (42, 14624), (47, 14648),

Gene: Estes_25 Start: 12213, Stop: 12578, Start Num: 13
Candidate Starts for Estes_25:
(6, 12150), (Start: 12 @12210 has 20 MA's), (Start: 13 @12213 has 3 MA's), (Start: 15 @12237 has 2 MA's), (16, 12246), (24, 12348), (32, 12441), (34, 12474), (35, 12477), (36, 12486), (40, 12522), (47, 12558),

Gene: Faith1_10 Start: 7692, Stop: 8030, Start Num: 17

Candidate Starts for Faith1_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: FarmResident_10 Start: 7417, Stop: 7755, Start Num: 17
Candidate Starts for FarmResident_10:
(Start: 17 @7417 has 78 MA's), (30, 7597), (44, 7723), (45, 7726), (47, 7735), (48, 7744),

Gene: Finemlucis_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Finemlucis_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Finnry_11 Start: 7841, Stop: 8179, Start Num: 17
Candidate Starts for Finnry_11:
(Start: 17 @7841 has 78 MA's), (30, 8021), (37, 8090), (44, 8147), (45, 8150), (47, 8159), (48, 8168),
(49, 8174),

Gene: FreakyGoo_21 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for FreakyGoo_21:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: Gabriela_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Gabriela_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Gardann_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Gardann_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: GardenSalsa_24 Start: 12046, Stop: 12414, Start Num: 12
Candidate Starts for GardenSalsa_24:
(6, 11986), (Start: 12 @12046 has 20 MA's), (Start: 13 @12049 has 3 MA's), (16, 12082), (24, 12184),
(32, 12277), (34, 12310), (35, 12313), (36, 12322), (47, 12394),

Gene: GenevaB15_24 Start: 12073, Stop: 12441, Start Num: 12
Candidate Starts for GenevaB15_24:
(6, 12013), (Start: 12 @12073 has 20 MA's), (Start: 13 @12076 has 3 MA's), (Start: 15 @12100 has 2
MA's), (16, 12109), (24, 12211), (32, 12304), (34, 12337), (35, 12340), (40, 12385), (47, 12421),

Gene: Glaske16_21 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for Glaske16_21:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: GuuelaD_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for GuuelaD_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (37, 7974), (39, 7986), (44, 8031), (45, 8034), (47, 8043),
(48, 8052),

Gene: Hafay_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for Hafay_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: Halena_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for Halena_10:

(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: IPhane7_20 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for IPhane7_20:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: Itos_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Itos_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Izel_21 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for Izel_21:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: Jobypre_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Jobypre_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: JoeDirt_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for JoeDirt_10:
(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: Jubie_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Jubie_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: Kahlid_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Kahlid_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Kingsolomon_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Kingsolomon_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: KirDoubleO7_9 Start: 7857, Stop: 8195, Start Num: 17
Candidate Starts for KirDoubleO7_9:
(Start: 17 @7857 has 78 MA's), (30, 8037), (37, 8106), (44, 8163), (45, 8166), (48, 8184),

Gene: KleverKiS_20 Start: 11506, Stop: 11874, Start Num: 12
Candidate Starts for KleverKiS_20:
(Start: 12 @11506 has 20 MA's), (24, 11644), (32, 11737), (37, 11785), (39, 11797),

Gene: Kropertea_10 Start: 7388, Stop: 7726, Start Num: 17
Candidate Starts for Kropertea_10:
(Start: 17 @7388 has 78 MA's), (30, 7568), (44, 7694), (45, 7697), (47, 7706), (48, 7715),

Gene: Krypton555_11 Start: 7833, Stop: 8171, Start Num: 17
Candidate Starts for Krypton555_11:
(Start: 17 @7833 has 78 MA's), (30, 8013), (37, 8082), (44, 8139), (45, 8142), (48, 8160),

Gene: Kumao_19 Start: 10846, Stop: 11211, Start Num: 12
Candidate Starts for Kumao_19:
(9, 10825), (Start: 12 @10846 has 20 MA's), (19, 10906), (24, 10981), (27, 11008), (32, 11074), (36, 11119), (37, 11122), (40, 11155), (43, 11176),

Gene: LeBron_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for LeBron_10:
(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: Lewan_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Lewan_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: LilDestine_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for LilDestine_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: LilhomieP_19 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for LilhomieP_19:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: LiyuLake_11 Start: 7848, Stop: 8186, Start Num: 17
Candidate Starts for LiyuLake_11:
(Start: 17 @7848 has 78 MA's), (30, 8028), (37, 8097), (44, 8154), (45, 8157), (48, 8175),

Gene: Loadrie_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for Loadrie_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: Lolly9_11 Start: 7851, Stop: 8189, Start Num: 17
Candidate Starts for Lolly9_11:
(Start: 17 @7851 has 78 MA's), (30, 8031), (37, 8100), (44, 8157), (45, 8160), (48, 8178),

Gene: Lumos_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Lumos_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171), (49, 8177),

Gene: Lynnae_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Lynnae_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: MAckerman_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for MAckerman_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: MaryV_32 Start: 14608, Stop: 14949, Start Num: 17
Candidate Starts for MaryV_32:
(Start: 17 @14608 has 78 MA's), (20, 14638), (22, 14692), (26, 14710), (28, 14743), (32, 14797), (36, 14842), (41, 14893), (42, 14896), (47, 14920),

Gene: Miley16_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Miley16_10:

(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: MiniLon_11 Start: 7851, Stop: 8189, Start Num: 17
Candidate Starts for MiniLon_11:
(Start: 17 @7851 has 78 MA's), (30, 8031), (37, 8100), (44, 8157), (45, 8160), (48, 8178),

Gene: MiniMac_11 Start: 7852, Stop: 8190, Start Num: 17
Candidate Starts for MiniMac_11:
(Start: 17 @7852 has 78 MA's), (30, 8032), (37, 8101), (44, 8158), (45, 8161), (48, 8179),

Gene: MkaliMitinis3_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for MkaliMitinis3_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Moostard_11 Start: 7840, Stop: 8178, Start Num: 17
Candidate Starts for Moostard_11:
(Start: 17 @7840 has 78 MA's), (30, 8020), (37, 8089), (44, 8146), (45, 8149), (47, 8158), (48, 8167),
(49, 8173),

Gene: MrMagoo_24 Start: 12049, Stop: 12414, Start Num: 13
Candidate Starts for MrMagoo_24:
(6, 11986), (Start: 12 @12046 has 20 MA's), (Start: 13 @12049 has 3 MA's), (16, 12082), (24, 12184),
(32, 12277), (34, 12310), (35, 12313), (36, 12322), (47, 12394),

Gene: MsGreen_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for MsGreen_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: Nanosmite_24 Start: 12264, Stop: 12632, Start Num: 12
Candidate Starts for Nanosmite_24:
(6, 12204), (Start: 12 @12264 has 20 MA's), (23, 12399), (24, 12402), (27, 12429), (31, 12486), (32,
12495), (34, 12528), (39, 12555), (40, 12576), (46, 12606), (47, 12612),

Gene: Netyap_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Netyap_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Nicholas_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Nicholas_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: Nicholasp3_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Nicholasp3_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: OhShagHennessy_10 Start: 7684, Stop: 8007, Start Num: 17
Candidate Starts for OhShagHennessy_10:
(Start: 17 @7684 has 78 MA's), (30, 7849), (36, 7915), (47, 7987), (48, 7996),

Gene: OverPar_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for OverPar_10:

(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: PYPDinur_10 Start: 7372, Stop: 7710, Start Num: 17
Candidate Starts for PYPDinur_10:
(Start: 17 @7372 has 78 MA's), (30, 7552), (44, 7678), (45, 7681), (47, 7690), (48, 7699),

Gene: PegLeg_20 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for PegLeg_20:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: Poochiewood_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Poochiewood_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Quby_10 Start: 7371, Stop: 7709, Start Num: 17
Candidate Starts for Quby_10:
(Start: 17 @7371 has 78 MA's), (21, 7449), (30, 7551), (44, 7677), (45, 7680), (47, 7689), (48, 7698),

Gene: Red305_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for Red305_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171),
(49, 8177),

Gene: Reindeer_18 Start: 11362, Stop: 11730, Start Num: 12
Candidate Starts for Reindeer_18:
(Start: 12 @11362 has 20 MA's), (Start: 15 @11389 has 2 MA's), (23, 11497), (24, 11500), (25, 11509),
(32, 11593), (35, 11629), (36, 11638), (37, 11641), (39, 11653), (40, 11674),

Gene: Rey_24 Start: 12284, Stop: 12652, Start Num: 13
Candidate Starts for Rey_24:
(6, 12221), (Start: 12 @12281 has 20 MA's), (Start: 13 @12284 has 3 MA's), (Start: 15 @12308 has 2
MA's), (16, 12317), (24, 12419), (32, 12512), (34, 12545), (35, 12548), (40, 12593), (47, 12629),

Gene: Rose5_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Rose5_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: RoseMarie_20 Start: 11780, Stop: 12121, Start Num: 15
Candidate Starts for RoseMarie_20:
(Start: 12 @11753 has 20 MA's), (14, 11777), (Start: 15 @11780 has 2 MA's), (24, 11891), (25, 11900),
(32, 11984), (37, 12032), (39, 12044), (40, 12065),

Gene: Rossetti_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Rossetti_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (45, 8001), (47, 8010), (48, 8019),

Gene: Rumpelstiltskin_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Rumpelstiltskin_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Samty_11 Start: 7840, Stop: 8178, Start Num: 17
Candidate Starts for Samty_11:

(Start: 17 @7840 has 78 MA's), (30, 8020), (37, 8089), (44, 8146), (45, 8149), (47, 8158), (48, 8167), (49, 8173),

Gene: Sarshaun_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for Sarshaun_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: Sheng711_10 Start: 7372, Stop: 7710, Start Num: 17
Candidate Starts for Sheng711_10:
(Start: 17 @7372 has 78 MA's), (30, 7552), (44, 7678), (45, 7681), (47, 7690), (48, 7699),

Gene: Silverleaf_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Silverleaf_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Skinny_21 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for Skinny_21:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: SlimJimmy_19 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for SlimJimmy_19:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: Snenia_11 Start: 7845, Stop: 8183, Start Num: 17
Candidate Starts for Snenia_11:
(Start: 17 @7845 has 78 MA's), (30, 8025), (37, 8094), (44, 8151), (45, 8154), (47, 8163), (48, 8172), (49, 8178),

Gene: SoJulia_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for SoJulia_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Soap141_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for Soap141_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: Tourach_10 Start: 7705, Stop: 8043, Start Num: 17
Candidate Starts for Tourach_10:
(Start: 17 @7705 has 78 MA's), (21, 7783), (30, 7885), (39, 7966), (44, 8011), (45, 8014), (47, 8023), (48, 8032),

Gene: TpudiCK_21 Start: 11509, Stop: 11877, Start Num: 12
Candidate Starts for TpudiCK_21:
(Start: 12 @11509 has 20 MA's), (24, 11647), (32, 11740), (37, 11788), (39, 11800),

Gene: TriFive_11 Start: 7844, Stop: 8182, Start Num: 17
Candidate Starts for TriFive_11:
(Start: 17 @7844 has 78 MA's), (30, 8024), (37, 8093), (44, 8150), (45, 8153), (47, 8162), (48, 8171), (49, 8177),

Gene: TyDawg_20 Start: 11510, Stop: 11878, Start Num: 12
Candidate Starts for TyDawg_20:
(Start: 12 @11510 has 20 MA's), (24, 11648), (32, 11741), (37, 11789), (39, 11801),

Gene: Tyson_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Tyson_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: UPIE_10 Start: 7708, Stop: 8031, Start Num: 17
Candidate Starts for UPIE_10:
(Start: 17 @7708 has 78 MA's), (30, 7873), (36, 7939), (47, 8011), (48, 8020),

Gene: Underpass_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Underpass_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Vetrix_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Vetrix_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Wamburgrxpress_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Wamburgrxpress_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Whirlwind_12 Start: 7838, Stop: 8176, Start Num: 17
Candidate Starts for Whirlwind_12:
(Start: 17 @7838 has 78 MA's), (30, 8018), (37, 8087), (44, 8144), (45, 8147), (48, 8165),

Gene: Wigglewiggle_10 Start: 7725, Stop: 8063, Start Num: 17
Candidate Starts for Wigglewiggle_10:
(Start: 17 @7725 has 78 MA's), (30, 7905), (39, 7986), (44, 8031), (47, 8043), (48, 8052),

Gene: Wildcat_32 Start: 14618, Stop: 14959, Start Num: 17
Candidate Starts for Wildcat_32:
(Start: 17 @14618 has 78 MA's), (20, 14648), (22, 14702), (26, 14720), (28, 14753), (32, 14807), (36, 14852), (41, 14903), (42, 14906), (47, 14930),

Gene: Wilder_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Wilder_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Winky_10 Start: 7692, Stop: 8030, Start Num: 17
Candidate Starts for Winky_10:
(Start: 17 @7692 has 78 MA's), (30, 7872), (39, 7953), (44, 7998), (47, 8010), (48, 8019),

Gene: Wyatt2_10 Start: 7710, Stop: 8033, Start Num: 17
Candidate Starts for Wyatt2_10:
(Start: 17 @7710 has 78 MA's), (30, 7875), (36, 7941), (47, 8013), (48, 8022),

Gene: Zakai_10 Start: 7680, Stop: 8018, Start Num: 17
Candidate Starts for Zakai_10:
(Start: 17 @7680 has 78 MA's), (30, 7860), (39, 7941), (44, 7986), (47, 7998), (48, 8007),

Gene: Zaria_10 Start: 7711, Stop: 8034, Start Num: 17
Candidate Starts for Zaria_10:
(Start: 17 @7711 has 78 MA's), (30, 7876), (36, 7942), (47, 8014), (48, 8023),

Gene: ZhongYanYuan_9 Start: 7520, Stop: 7858, Start Num: 17
Candidate Starts for ZhongYanYuan_9:
(Start: 17 @7520 has 78 MA's), (21, 7598), (30, 7700), (39, 7781), (44, 7826), (45, 7829), (47, 7838), (48, 7847),