

Pham 77963

1: Phasih_43	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2: LilMoolah_Draft_45 + 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3: DLane_43 + 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4: Estave1_46 + 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5: Enby_Draft_43 + 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6: Plumbus_Draft_48 + 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7: RockyHorror_46 + 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8: Drago_44 + 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9: PopTart_41 + 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10: Boomer_48	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11: DaWorst_47	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12: Filuzino_43	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
13: Galactic_45 + 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
14: Dante_45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15: Bobi_48	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
16: RitaG_43 + 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17: JoeyJr_43 + 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
18: NormanBulbeJr_47 + 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
19: CaptainTrips_43	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
20: Doomphist_45 + 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
21: Kenuha5_41	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
22: Grr_46 + 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
23: Melissauren88_44	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
24: SimranZ1_45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
25: Shauna1_40	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
26: KingMidas_47	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
27: SG4_44 + 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
28: Ruby_44	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
29: Poenanya_45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
30: Renaud18_48	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
31: Seagreen_46	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
32: Zerg_44	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
33: MinionDave_45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
34: Empress_46	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
35: XFactor_44	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
36: Spoonbill_45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Note: In the above figure, yellow indicates the location of called starts comprised solely of computational predictions (i.e. auto-annotations by Glimmer/GeneMark), green indicates the location of called starts with at least 1 manual gene annotation.

Pham 77963 Report

This analysis was run 09/23/19.

Pham number 77963 has 94 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Phasih_43
- Track 2 : LilMoolah_Draft_45, Ibhubesi_46, Nivrat_44, BodEinwohner17_Draft_44, Seabastian_Draft_47, Lizziana_52, Priscilla_46, Eish_Draft_45, Cabrinians_47, DirtMcgirt_Draft_47, ArcusAngelus_49, Llij_42, Sparkdehlily_48, Koella_40, Nitzel_41
- Track 3 : DLane_43, Cornucopia_49, Emma_46, EleanorGeorge_43
- Track 4 : Estave1_46, Burwell21_45, Llama_47, Juice456_47, Modragons_46, Latretium_Draft_49, Taj_47, OfUltron_Draft_48, OlympiaSaint_45, TDanisky_48, Phatniss_43, Krakatau_43
- Track 5 : Enby_Draft_49, Lorde_Draft_46, Batiatus_45, Strokeseat_Draft_45
- Track 6 : Plumbus_Draft_48, Kersh_46, Pollywog_44, Ochi17_45, UncleRicky_45, Whouxphf_44
- Track 7 : RockyHorror_46, Job42_46, Blexus_Draft_43
- Track 8 : Drago_44, PMC_40
- Track 9 : PopTart_41, SassyB_41
- Track 10 : Boomer_48
- Track 11 : DaWorst_47
- Track 12 : Filuzino_43
- Track 13 : Galactic_45, Ovechkin_43, StAnnes_Draft_46, Flathead_46, KristaRAM_45
- Track 14 : Dante_45
- Track 15 : Bobi_48
- Track 16 : RitaG_43, Minnie_48
- Track 17 : JoeyJr_43, Geralt_43, PHappiness_43, Scottish_Draft_46, Inventum_42, Polka14_44, Nimbo_42, Pacc40_42
- Track 18 : NormanBulbieJr_47, Mozy_54, ShiLan_46
- Track 19 : CaptainTrips_43
- Track 20 : Doomphist_45, Dorothy_42
- Track 21 : Kenuha5_41
- Track 22 : Girr_46, MisterCuddles_45, Daenerys_42
- Track 23 : Melissauren88_44
- Track 24 : SimranZ1_45
- Track 25 : Shauna1_40
- Track 26 : KingMidas_47
- Track 27 : SG4_44, Ogopogo_46
- Track 28 : Ruby_44
- Track 29 : Poenanya_45
- Track 30 : Renaud18_48
- Track 31 : Seagreen_46
- Track 32 : Zerg_44
- Track 33 : MinionDave_45
- Track 34 : Empress_46
- Track 35 : XFactor_44

- Track 36 : Spoonbill_45

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

The start number called the most often in the published annotations is 2, it was called in 20 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArcusAngelus_49, BodEinwohner17_Draft_44, Cabrinians_47, DirtMcgirt_Draft_47, Eish_Draft_45, Geralt_43, Ibhubesi_46, Inventum_42, JoeyJr_43, Koella_40, LilMoolah_Draft_45, Lizziana_52, Llij_42, Nimbo_42, Nitzel_41, Nivrat_44, PHappiness_43, Pacc40_42, Phasih_43, Polka14_44, PopTart_41, Priscilla_46, SassyB_41, Scottish_Draft_46, Sebastian_Draft_47, Sparkdehlily_48,

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

- Blexus_Draft_43, Boomer_48, Burwell21_45, Daenerys_42, Dante_45, Doomphist_45, Dorothy_42, Drago_44, Estave1_46, Girr_46, Job42_46, Juice456_47, Kenuha5_41, Kersh_46, KingMidas_47, Krakatau_43, Latretium_Draft_49, Llama_47, Minnie_48, MisterCuddles_45, Modragons_46, Mozy_54, NormanBulbieJr_47, Ochi17_45, OfUltron_Draft_48, OlympiaSaint_45, PMC_40, Phatniss_43, Plumbus_Draft_48, Poenanya_45, Pollywog_44, Renaud18_48, RitaG_43, RockyHorror_46, Shauna1_40, ShiLan_46, SimranZ1_45, Spoonbill_45, TDanisky_48, Taj_47, UncleRicky_45, Whouxphf_44, Zerg_44,

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

- Batiatus_45, Bobi_48, CaptainTrips_43, Cornucopia_49, DLane_43, DaWorst_47, EleanorGeorge_43, Emma_46, Empress_46, Enby_Draft_49, Filuzino_43, Flathead_46, Galactic_45, KristaRAM_45, Lorde_Draft_46, Melissauren88_44, MinionDave_45, Ogopogo_46, Ovechkin_43, Ruby_44, SG4_44, Seagreen_46, StAnnes_Draft_46, Strokeseat_Draft_45, XFactor_44,

Summary by start number:

Start 1:

- Found in 69 of 94 (73.4%) of genes in pham
- Called 1.4% of time when present
- Phage where called: Boomer_48,

Start 2:

- Found in 69 of 94 (73.4%) of genes in pham
- Called 37.7% of time when present
- Phage where called: ArcusAngelus_49, BodEinwohner17_Draft_44, Cabrinians_47, DirtMcgirt_Draft_47, Eish_Draft_45, Geralt_43, Ibhubesi_46, Inventum_42, JoeyJr_43, Koella_40, LilMoolah_Draft_45, Lizziana_52, Llij_42, Nimbo_42, Nitzel_41, Nivrat_44, PHappiness_43, Pacc40_42, Phasih_43, Polka14_44, PopTart_41, Priscilla_46, SassyB_41, Scottish_Draft_46, Sebastian_Draft_47, Sparkdehlily_48,

Start 3:

- Found in 8 of 94 (8.5%) of genes in pham

- Called 37.5% of time when present
- Phage where called: Blexus_Draft_43, Job42_46, RockyHorror_46,

Start 4:

- Found in 89 of 94 (94.7%) of genes in pham
- Called 13.5% of time when present
- Phage where called: Batiatus_45, Cornucopia_49, DLane_43, Drago_44, EleanorGeorge_43, Emma_46, Enby_Draft_49, Lorde_Draft_46, PMC_40, Spoonbill_45, Strokeseat_Draft_45, XFactor_44,

Start 5:

- Found in 1 of 94 (1.1%) of genes in pham
- Called 100.0% of time when present
- Phage where called: Ruby_44,

Start 6:

- Found in 16 of 94 (17.0%) of genes in pham
- Called 12.5% of time when present
- Phage where called: Minnie_48, RitaG_43,

Start 7:

- Found in 8 of 94 (8.5%) of genes in pham
- Called 12.5% of time when present
- Phage where called: Melissauren88_44,

Start 8:

- Found in 71 of 94 (75.5%) of genes in pham
- Called 23.9% of time when present
- Phage where called: Burwell21_45, Doomphist_45, Dorothy_42, Estave1_46, Juice456_47, Kenuha5_41, KingMidas_47, Krakatau_43, Latretium_Draft_49, Llama_47, MinionDave_45, Modragons_46, OfUltron_Draft_48, OlympiaSaint_45, Phatniss_43, TDanisky_48, Taj_47,

Start 9:

- Found in 92 of 94 (97.9%) of genes in pham
- Called 16.3% of time when present
- Phage where called: Dante_45, Flathead_46, Galactic_45, KristaRAM_45, Mozy_54, NormanBulbieJr_47, Ogopogo_46, Ovechkin_43, SG4_44, Seagreen_46, Shauna1_40, ShiLan_46, SimranZ1_45, StAnnes_Draft_46, Zerg_44,

Start 11:

- Found in 94 of 94 (100.0%) of genes in pham
- Called 17.0% of time when present
- Phage where called: Bobi_48, CaptainTrips_43, DaWorst_47, Daenerys_42, Empress_46, Filuzino_43, Girr_46, Kersh_46, MisterCuddles_45, Ochi17_45, Plumbus_Draft_48, Poenanya_45, Pollywog_44, Renaud18_48, UncleRicky_45, Whouxphf_44,

Gene Information:

Gene: ArcusAngelus_49 Start: 37110, Stop: 36370, Start Num: 2

Candidate Starts for ArcusAngelus_49:

(1, 37116), (2, 37110), (4, 37041), (8, 36990), (9, 36972), (11, 36942), (13, 36723), (16, 36552)

Gene: Batiatus_45 Start: 35723, Stop: 35055, Start Num: 4

Candidate Starts for Batiatus_45:

(4, 35723), (7, 35675), (9, 35654), (11, 35624), (12, 35468), (13, 35405), (14, 35372), (16, 35234)

Gene: Blexus_Draft_43 Start: 34826, Stop: 34104, Start Num: 3

Candidate Starts for Blexus_Draft_43:

(1, 34847), (2, 34841), (3, 34826), (4, 34772), (8, 34721), (9, 34703), (11, 34673), (13, 34454), (16, 34283)

Gene: Bobi_48 Start: 36367, Stop: 35798, Start Num: 11

Candidate Starts for Bobi_48:

(4, 36466), (9, 36397), (11, 36367), (12, 36211), (13, 36148), (14, 36115), (16, 35977)

Gene: BodEinwohner17_Draft_44 Start: 34783, Stop: 34043, Start Num: 2

Candidate Starts for BodEinwohner17_Draft_44:

(1, 34789), (2, 34783), (4, 34714), (8, 34663), (9, 34645), (11, 34615), (13, 34396), (16, 34225)

Gene: Boomer_48 Start: 36022, Stop: 35276, Start Num: 1

Candidate Starts for Boomer_48:

(1, 36022), (2, 36016), (4, 35947), (8, 35896), (9, 35878), (11, 35848), (13, 35629), (16, 35458)

Gene: Burwell21_45 Start: 35928, Stop: 35308, Start Num: 8

Candidate Starts for Burwell21_45:

(1, 36054), (2, 36048), (4, 35979), (8, 35928), (9, 35910), (11, 35880), (13, 35661), (16, 35490)

Gene: Cabrinians_47 Start: 36126, Stop: 35386, Start Num: 2

Candidate Starts for Cabrinians_47:

(1, 36132), (2, 36126), (4, 36057), (8, 36006), (9, 35988), (11, 35958), (13, 35739), (16, 35568)

Gene: CaptainTrips_43 Start: 34800, Stop: 34231, Start Num: 11

Candidate Starts for CaptainTrips_43:

(4, 34899), (8, 34848), (9, 34830), (11, 34800), (12, 34644), (13, 34581), (14, 34548), (16, 34410)

Gene: Cornucopia_49 Start: 36045, Stop: 35377, Start Num: 4

Candidate Starts for Cornucopia_49:

(4, 36045), (9, 35976), (11, 35946), (12, 35790), (13, 35727), (14, 35694), (16, 35556)

Gene: DLane_43 Start: 34828, Stop: 34160, Start Num: 4

Candidate Starts for DLane_43:

(4, 34828), (9, 34759), (11, 34729), (12, 34573), (13, 34510), (14, 34477), (16, 34339)

Gene: DaWorst_47 Start: 35474, Stop: 34905, Start Num: 11

Candidate Starts for DaWorst_47:

(4, 35573), (7, 35525), (9, 35504), (11, 35474), (12, 35318), (13, 35255), (14, 35222), (16, 35084)

Gene: Daenerys_42 Start: 34265, Stop: 33693, Start Num: 11

Candidate Starts for Daenerys_42:

(1, 34439), (2, 34433), (4, 34364), (6, 34319), (8, 34313), (9, 34295), (11, 34265), (13, 34046), (16, 33875)

Gene: Dante_45 Start: 34409, Stop: 33807, Start Num: 9
Candidate Starts for Dante_45:
(1, 34553), (2, 34547), (4, 34478), (6, 34433), (8, 34427), (9, 34409), (11, 34379), (13, 34160), (16, 33989)

Gene: DirtMcgirt_Draft_47 Start: 34084, Stop: 33344, Start Num: 2
Candidate Starts for DirtMcgirt_Draft_47:
(1, 34090), (2, 34084), (4, 34015), (8, 33964), (9, 33946), (11, 33916), (13, 33697), (16, 33526)

Gene: Doomphist_45 Start: 35661, Stop: 35041, Start Num: 8
Candidate Starts for Doomphist_45:
(1, 35787), (2, 35781), (3, 35766), (4, 35712), (8, 35661), (9, 35643), (11, 35613), (13, 35394), (16, 35223)

Gene: Dorothy_42 Start: 34460, Stop: 33840, Start Num: 8
Candidate Starts for Dorothy_42:
(1, 34586), (2, 34580), (3, 34565), (4, 34511), (8, 34460), (9, 34442), (11, 34412), (13, 34193), (16, 34022)

Gene: Drago_44 Start: 34018, Stop: 33347, Start Num: 4
Candidate Starts for Drago_44:
(1, 34093), (2, 34087), (4, 34018), (8, 33967), (9, 33949), (11, 33919), (13, 33700), (16, 33529)

Gene: Eish_Draft_45 Start: 35128, Stop: 34388, Start Num: 2
Candidate Starts for Eish_Draft_45:
(1, 35134), (2, 35128), (4, 35059), (8, 35008), (9, 34990), (11, 34960), (13, 34741), (16, 34570)

Gene: EleanorGeorge_43 Start: 34206, Stop: 33538, Start Num: 4
Candidate Starts for EleanorGeorge_43:
(4, 34206), (9, 34137), (11, 34107), (12, 33951), (13, 33888), (14, 33855), (16, 33717)

Gene: Emma_46 Start: 35235, Stop: 34567, Start Num: 4
Candidate Starts for Emma_46:
(4, 35235), (9, 35166), (11, 35136), (12, 34980), (13, 34917), (14, 34884), (16, 34746)

Gene: Empress_46 Start: 35678, Stop: 35106, Start Num: 11
Candidate Starts for Empress_46:
(11, 35678), (13, 35459), (16, 35288)

Gene: Enby_Draft_49 Start: 34411, Stop: 33743, Start Num: 4
Candidate Starts for Enby_Draft_49:
(4, 34411), (7, 34363), (9, 34342), (11, 34312), (12, 34156), (13, 34093), (14, 34060), (16, 33922)

Gene: Estave1_46 Start: 34410, Stop: 33790, Start Num: 8
Candidate Starts for Estave1_46:
(1, 34536), (2, 34530), (4, 34461), (8, 34410), (9, 34392), (11, 34362), (13, 34143), (16, 33972)

Gene: Filuzino_43 Start: 33794, Stop: 33225, Start Num: 11
Candidate Starts for Filuzino_43:
(4, 33893), (9, 33824), (11, 33794), (12, 33638), (13, 33575), (16, 33404)

Gene: Flathead_46 Start: 36098, Stop: 35499, Start Num: 9
Candidate Starts for Flathead_46:

(4, 36167), (9, 36098), (11, 36068), (12, 35912), (13, 35849), (14, 35816), (16, 35678)

Gene: Galactic_45 Start: 35277, Stop: 34678, Start Num: 9

Candidate Starts for Galactic_45:

(4, 35346), (9, 35277), (11, 35247), (12, 35091), (13, 35028), (14, 34995), (16, 34857)

Gene: Geralt_43 Start: 34401, Stop: 33661, Start Num: 2

Candidate Starts for Geralt_43:

(1, 34407), (2, 34401), (4, 34332), (6, 34287), (8, 34281), (9, 34263), (11, 34233), (13, 34014), (16, 33843)

Gene: Girr_46 Start: 35274, Stop: 34702, Start Num: 11

Candidate Starts for Girr_46:

(1, 35448), (2, 35442), (4, 35373), (6, 35328), (8, 35322), (9, 35304), (11, 35274), (13, 35055), (16, 34884)

Gene: Ibhubesi_46 Start: 35173, Stop: 34433, Start Num: 2

Candidate Starts for Ibhubesi_46:

(1, 35179), (2, 35173), (4, 35104), (8, 35053), (9, 35035), (11, 35005), (13, 34786), (16, 34615)

Gene: Inventum_42 Start: 35114, Stop: 34374, Start Num: 2

Candidate Starts for Inventum_42:

(1, 35120), (2, 35114), (4, 35045), (6, 35000), (8, 34994), (9, 34976), (11, 34946), (13, 34727), (16, 34556)

Gene: Job42_46 Start: 36416, Stop: 35691, Start Num: 3

Candidate Starts for Job42_46:

(1, 36437), (2, 36431), (3, 36416), (4, 36362), (8, 36311), (9, 36293), (11, 36263), (13, 36044), (16, 35873)

Gene: JoeyJr_43 Start: 34601, Stop: 33861, Start Num: 2

Candidate Starts for JoeyJr_43:

(1, 34607), (2, 34601), (4, 34532), (6, 34487), (8, 34481), (9, 34463), (11, 34433), (13, 34214), (16, 34043)

Gene: Juice456_47 Start: 36056, Stop: 35439, Start Num: 8

Candidate Starts for Juice456_47:

(1, 36182), (2, 36176), (4, 36107), (8, 36056), (9, 36038), (11, 36008), (13, 35789), (16, 35618)

Gene: Kenuha5_41 Start: 33689, Stop: 33072, Start Num: 8

Candidate Starts for Kenuha5_41:

(1, 33815), (2, 33809), (4, 33740), (8, 33689), (9, 33671), (11, 33641), (12, 33485), (13, 33422), (14, 33389), (16, 33251)

Gene: Kersh_46 Start: 36309, Stop: 35737, Start Num: 11

Candidate Starts for Kersh_46:

(1, 36483), (2, 36477), (4, 36408), (8, 36357), (9, 36339), (11, 36309), (13, 36090), (16, 35919)

Gene: KingMidas_47 Start: 36143, Stop: 35523, Start Num: 8

Candidate Starts for KingMidas_47:

(1, 36269), (2, 36263), (4, 36194), (6, 36149), (8, 36143), (9, 36125), (11, 36095), (13, 35876), (16, 35705)

Gene: Koella_40 Start: 32024, Stop: 31284, Start Num: 2
Candidate Starts for Koella_40:
(1, 32030), (2, 32024), (4, 31955), (8, 31904), (9, 31886), (11, 31856), (13, 31637), (16, 31466)

Gene: Krakatau_43 Start: 34815, Stop: 34195, Start Num: 8
Candidate Starts for Krakatau_43:
(1, 34941), (2, 34935), (4, 34866), (8, 34815), (9, 34797), (11, 34767), (13, 34548), (16, 34377)

Gene: KristaRAM_45 Start: 36010, Stop: 35411, Start Num: 9
Candidate Starts for KristaRAM_45:
(4, 36079), (9, 36010), (11, 35980), (12, 35824), (13, 35761), (14, 35728), (16, 35590)

Gene: Latretium_Draft_49 Start: 35933, Stop: 35313, Start Num: 8
Candidate Starts for Latretium_Draft_49:
(1, 36059), (2, 36053), (4, 35984), (8, 35933), (9, 35915), (11, 35885), (13, 35666), (16, 35495)

Gene: LilMoolah_Draft_45 Start: 34833, Stop: 34093, Start Num: 2
Candidate Starts for LilMoolah_Draft_45:
(1, 34839), (2, 34833), (4, 34764), (8, 34713), (9, 34695), (11, 34665), (13, 34446), (16, 34275)

Gene: Lizziana_52 Start: 37097, Stop: 36357, Start Num: 2
Candidate Starts for Lizziana_52:
(1, 37103), (2, 37097), (4, 37028), (8, 36977), (9, 36959), (11, 36929), (13, 36710), (16, 36539)

Gene: Llama_47 Start: 35849, Stop: 35229, Start Num: 8
Candidate Starts for Llama_47:
(1, 35975), (2, 35969), (4, 35900), (8, 35849), (9, 35831), (11, 35801), (13, 35582), (16, 35411)

Gene: Llij_42 Start: 34241, Stop: 33501, Start Num: 2
Candidate Starts for Llij_42:
(1, 34247), (2, 34241), (4, 34172), (8, 34121), (9, 34103), (11, 34073), (13, 33854), (16, 33683)

Gene: Lorde_Draft_46 Start: 34386, Stop: 33718, Start Num: 4
Candidate Starts for Lorde_Draft_46:
(4, 34386), (7, 34338), (9, 34317), (11, 34287), (12, 34131), (13, 34068), (14, 34035), (16, 33897)

Gene: Melissauren88_44 Start: 35089, Stop: 34469, Start Num: 7
Candidate Starts for Melissauren88_44:
(4, 35137), (7, 35089), (9, 35068), (11, 35038), (12, 34882), (13, 34819), (14, 34786), (16, 34648)

Gene: MinionDave_45 Start: 35623, Stop: 35006, Start Num: 8
Candidate Starts for MinionDave_45:
(4, 35674), (8, 35623), (9, 35605), (11, 35575), (12, 35419), (13, 35356), (14, 35323), (16, 35185)

Gene: Minnie_48 Start: 35798, Stop: 35175, Start Num: 6
Candidate Starts for Minnie_48:
(1, 35918), (2, 35912), (4, 35843), (6, 35798), (8, 35792), (9, 35774), (11, 35744), (13, 35525), (16, 35354)

Gene: MisterCuddles_45 Start: 35274, Stop: 34702, Start Num: 11
Candidate Starts for MisterCuddles_45:
(1, 35448), (2, 35442), (4, 35373), (6, 35328), (8, 35322), (9, 35304), (11, 35274), (13, 35055), (16, 34884)

Gene: Modragons_46 Start: 35695, Stop: 35075, Start Num: 8

Candidate Starts for Modragons_46:

(1, 35821), (2, 35815), (4, 35746), (8, 35695), (9, 35677), (11, 35647), (13, 35428), (16, 35257)

Gene: Mozy_54 Start: 37161, Stop: 36559, Start Num: 9

Candidate Starts for Mozy_54:

(1, 37305), (2, 37299), (4, 37230), (8, 37179), (9, 37161), (11, 37131), (13, 36912), (16, 36741)

Gene: Nimbo_42 Start: 34404, Stop: 33664, Start Num: 2

Candidate Starts for Nimbo_42:

(1, 34410), (2, 34404), (4, 34335), (6, 34290), (8, 34284), (9, 34266), (11, 34236), (13, 34017), (16, 33846)

Gene: Nitzel_41 Start: 34509, Stop: 33769, Start Num: 2

Candidate Starts for Nitzel_41:

(1, 34515), (2, 34509), (4, 34440), (8, 34389), (9, 34371), (11, 34341), (13, 34122), (16, 33951)

Gene: Nivrat_44 Start: 34706, Stop: 33966, Start Num: 2

Candidate Starts for Nivrat_44:

(1, 34712), (2, 34706), (4, 34637), (8, 34586), (9, 34568), (11, 34538), (13, 34319), (16, 34148)

Gene: NormanBulbieJr_47 Start: 35899, Stop: 35297, Start Num: 9

Candidate Starts for NormanBulbieJr_47:

(1, 36043), (2, 36037), (4, 35968), (8, 35917), (9, 35899), (11, 35869), (13, 35650), (16, 35479)

Gene: Ochi17_45 Start: 35254, Stop: 34682, Start Num: 11

Candidate Starts for Ochi17_45:

(1, 35428), (2, 35422), (4, 35353), (8, 35302), (9, 35284), (11, 35254), (13, 35035), (16, 34864)

Gene: OfUltron_Draft_48 Start: 35851, Stop: 35231, Start Num: 8

Candidate Starts for OfUltron_Draft_48:

(1, 35977), (2, 35971), (4, 35902), (8, 35851), (9, 35833), (11, 35803), (13, 35584), (16, 35413)

Gene: Ogopogo_46 Start: 34219, Stop: 33620, Start Num: 9

Candidate Starts for Ogopogo_46:

(4, 34288), (7, 34240), (9, 34219), (11, 34189), (12, 34033), (13, 33970), (14, 33937), (16, 33799)

Gene: OlympiaSaint_45 Start: 34760, Stop: 34140, Start Num: 8

Candidate Starts for OlympiaSaint_45:

(1, 34886), (2, 34880), (4, 34811), (8, 34760), (9, 34742), (11, 34712), (13, 34493), (16, 34322)

Gene: Ovechkin_43 Start: 35449, Stop: 34850, Start Num: 9

Candidate Starts for Ovechkin_43:

(4, 35518), (9, 35449), (11, 35419), (12, 35263), (13, 35200), (14, 35167), (16, 35029)

Gene: PHappiness_43 Start: 34377, Stop: 33637, Start Num: 2

Candidate Starts for PHappiness_43:

(1, 34383), (2, 34377), (4, 34308), (6, 34263), (8, 34257), (9, 34239), (11, 34209), (13, 33990), (16, 33819)

Gene: PMC_40 Start: 34183, Stop: 33512, Start Num: 4

Candidate Starts for PMC_40:

(1, 34258), (2, 34252), (4, 34183), (8, 34132), (9, 34114), (11, 34084), (13, 33865), (16, 33694)

Gene: Pacc40_42 Start: 34451, Stop: 33711, Start Num: 2

Candidate Starts for Pacc40_42:

(1, 34457), (2, 34451), (4, 34382), (6, 34337), (8, 34331), (9, 34313), (11, 34283), (13, 34064), (16, 33893)

Gene: Phasih_43 Start: 34796, Stop: 34056, Start Num: 2

Candidate Starts for Phasih_43:

(1, 34802), (2, 34796), (3, 34781), (4, 34727), (8, 34676), (9, 34658), (11, 34628), (13, 34409), (16, 34238)

Gene: Phatniss_43 Start: 34638, Stop: 34018, Start Num: 8

Candidate Starts for Phatniss_43:

(1, 34764), (2, 34758), (4, 34689), (8, 34638), (9, 34620), (11, 34590), (13, 34371), (16, 34200)

Gene: Plumbus_Draft_48 Start: 34336, Stop: 33764, Start Num: 11

Candidate Starts for Plumbus_Draft_48:

(1, 34510), (2, 34504), (4, 34435), (8, 34384), (9, 34366), (11, 34336), (13, 34117), (16, 33946)

Gene: Poenanya_45 Start: 35613, Stop: 35041, Start Num: 11

Candidate Starts for Poenanya_45:

(1, 35787), (2, 35781), (3, 35766), (4, 35712), (8, 35661), (9, 35643), (11, 35613), (13, 35394), (16, 35223)

Gene: Polka14_44 Start: 35054, Stop: 34314, Start Num: 2

Candidate Starts for Polka14_44:

(1, 35060), (2, 35054), (4, 34985), (6, 34940), (8, 34934), (9, 34916), (11, 34886), (13, 34667), (16, 34496)

Gene: Pollywog_44 Start: 34791, Stop: 34219, Start Num: 11

Candidate Starts for Pollywog_44:

(1, 34965), (2, 34959), (4, 34890), (8, 34839), (9, 34821), (11, 34791), (13, 34572), (16, 34401)

Gene: PopTart_41 Start: 34264, Stop: 33524, Start Num: 2

Candidate Starts for PopTart_41:

(1, 34270), (2, 34264), (8, 34144), (9, 34126), (11, 34096), (13, 33877), (16, 33706)

Gene: Priscilla_46 Start: 36136, Stop: 35396, Start Num: 2

Candidate Starts for Priscilla_46:

(1, 36142), (2, 36136), (4, 36067), (8, 36016), (9, 35998), (11, 35968), (13, 35749), (16, 35578)

Gene: Renaud18_48 Start: 35135, Stop: 34566, Start Num: 11

Candidate Starts for Renaud18_48:

(1, 35309), (2, 35303), (4, 35234), (8, 35183), (9, 35165), (11, 35135), (13, 34916), (14, 34883), (16, 34745)

Gene: RitaG_43 Start: 34608, Stop: 33982, Start Num: 6

Candidate Starts for RitaG_43:

(1, 34728), (2, 34722), (4, 34653), (6, 34608), (8, 34602), (9, 34584), (11, 34554), (13, 34335), (16, 34164)

Gene: RockyHorror_46 Start: 34639, Stop: 33914, Start Num: 3

Candidate Starts for RockyHorror_46:

(1, 34660), (2, 34654), (3, 34639), (4, 34585), (8, 34534), (9, 34516), (11, 34486), (13, 34267), (16, 34096)

Gene: Ruby_44 Start: 35364, Stop: 34702, Start Num: 5

Candidate Starts for Ruby_44:

(5, 35364), (10, 35295), (11, 35274), (13, 35055), (16, 34884)

Gene: SG4_44 Start: 34827, Stop: 34228, Start Num: 9

Candidate Starts for SG4_44:

(4, 34896), (7, 34848), (9, 34827), (11, 34797), (12, 34641), (13, 34578), (14, 34545), (16, 34407)

Gene: SassyB_41 Start: 34264, Stop: 33524, Start Num: 2

Candidate Starts for SassyB_41:

(1, 34270), (2, 34264), (8, 34144), (9, 34126), (11, 34096), (13, 33877), (16, 33706)

Gene: Scottish_Draft_46 Start: 35734, Stop: 34994, Start Num: 2

Candidate Starts for Scottish_Draft_46:

(1, 35740), (2, 35734), (4, 35665), (6, 35620), (8, 35614), (9, 35596), (11, 35566), (13, 35347), (16, 35176)

Gene: Seabastian_Draft_47 Start: 35971, Stop: 35231, Start Num: 2

Candidate Starts for Seabastian_Draft_47:

(1, 35977), (2, 35971), (4, 35902), (8, 35851), (9, 35833), (11, 35803), (13, 35584), (16, 35413)

Gene: Seagreen_46 Start: 34859, Stop: 34257, Start Num: 9

Candidate Starts for Seagreen_46:

(9, 34859), (11, 34829), (13, 34610), (16, 34439)

Gene: Shauna1_40 Start: 33581, Stop: 32982, Start Num: 9

Candidate Starts for Shauna1_40:

(1, 33725), (2, 33719), (4, 33650), (8, 33599), (9, 33581), (11, 33551), (12, 33395), (13, 33332), (14, 33299), (16, 33161)

Gene: ShiLan_46 Start: 35945, Stop: 35343, Start Num: 9

Candidate Starts for ShiLan_46:

(1, 36089), (2, 36083), (4, 36014), (8, 35963), (9, 35945), (11, 35915), (13, 35696), (16, 35525)

Gene: SimranZ1_45 Start: 34125, Stop: 33523, Start Num: 9

Candidate Starts for SimranZ1_45:

(1, 34269), (2, 34263), (4, 34194), (8, 34143), (9, 34125), (11, 34095), (13, 33876), (15, 33726), (16, 33705)

Gene: Sparkdehlily_48 Start: 35654, Stop: 34914, Start Num: 2

Candidate Starts for Sparkdehlily_48:

(1, 35660), (2, 35654), (4, 35585), (8, 35534), (9, 35516), (11, 35486), (13, 35267), (16, 35096)

Gene: Spoonbill_45 Start: 34607, Stop: 33936, Start Num: 4

Candidate Starts for Spoonbill_45:

(1, 34682), (2, 34676), (4, 34607), (6, 34562), (8, 34556), (9, 34538), (11, 34508), (13, 34289), (16, 34118)

Gene: StAnnes_Draft_46 Start: 36046, Stop: 35447, Start Num: 9

Candidate Starts for StAnnes_Draft_46:

(4, 36115), (9, 36046), (11, 36016), (12, 35860), (13, 35797), (14, 35764), (16, 35626)

Gene: Strokeseat_Draft_45 Start: 34350, Stop: 33682, Start Num: 4

Candidate Starts for Strokeseat_Draft_45:

(4, 34350), (7, 34302), (9, 34281), (11, 34251), (12, 34095), (13, 34032), (14, 33999), (16, 33861)

Gene: TDanisky_48 Start: 35534, Stop: 34914, Start Num: 8

Candidate Starts for TDanisky_48:

(1, 35660), (2, 35654), (4, 35585), (8, 35534), (9, 35516), (11, 35486), (13, 35267), (16, 35096)

Gene: Taj_47 Start: 35103, Stop: 34483, Start Num: 8

Candidate Starts for Taj_47:

(1, 35229), (2, 35223), (4, 35154), (8, 35103), (9, 35085), (11, 35055), (13, 34836), (16, 34665)

Gene: UncleRicky_45 Start: 35416, Stop: 34844, Start Num: 11

Candidate Starts for UncleRicky_45:

(1, 35590), (2, 35584), (4, 35515), (8, 35464), (9, 35446), (11, 35416), (13, 35197), (16, 35026)

Gene: Whouxphf_44 Start: 34589, Stop: 34017, Start Num: 11

Candidate Starts for Whouxphf_44:

(1, 34763), (2, 34757), (4, 34688), (8, 34637), (9, 34619), (11, 34589), (13, 34370), (16, 34199)

Gene: XFactor_44 Start: 34845, Stop: 34177, Start Num: 4

Candidate Starts for XFactor_44:

(4, 34845), (9, 34776), (11, 34746), (12, 34590), (13, 34527), (16, 34356)

Gene: Zerg_44 Start: 34625, Stop: 34023, Start Num: 9

Candidate Starts for Zerg_44:

(1, 34769), (2, 34763), (3, 34748), (4, 34694), (8, 34643), (9, 34625), (11, 34595), (13, 34376), (16, 34205)