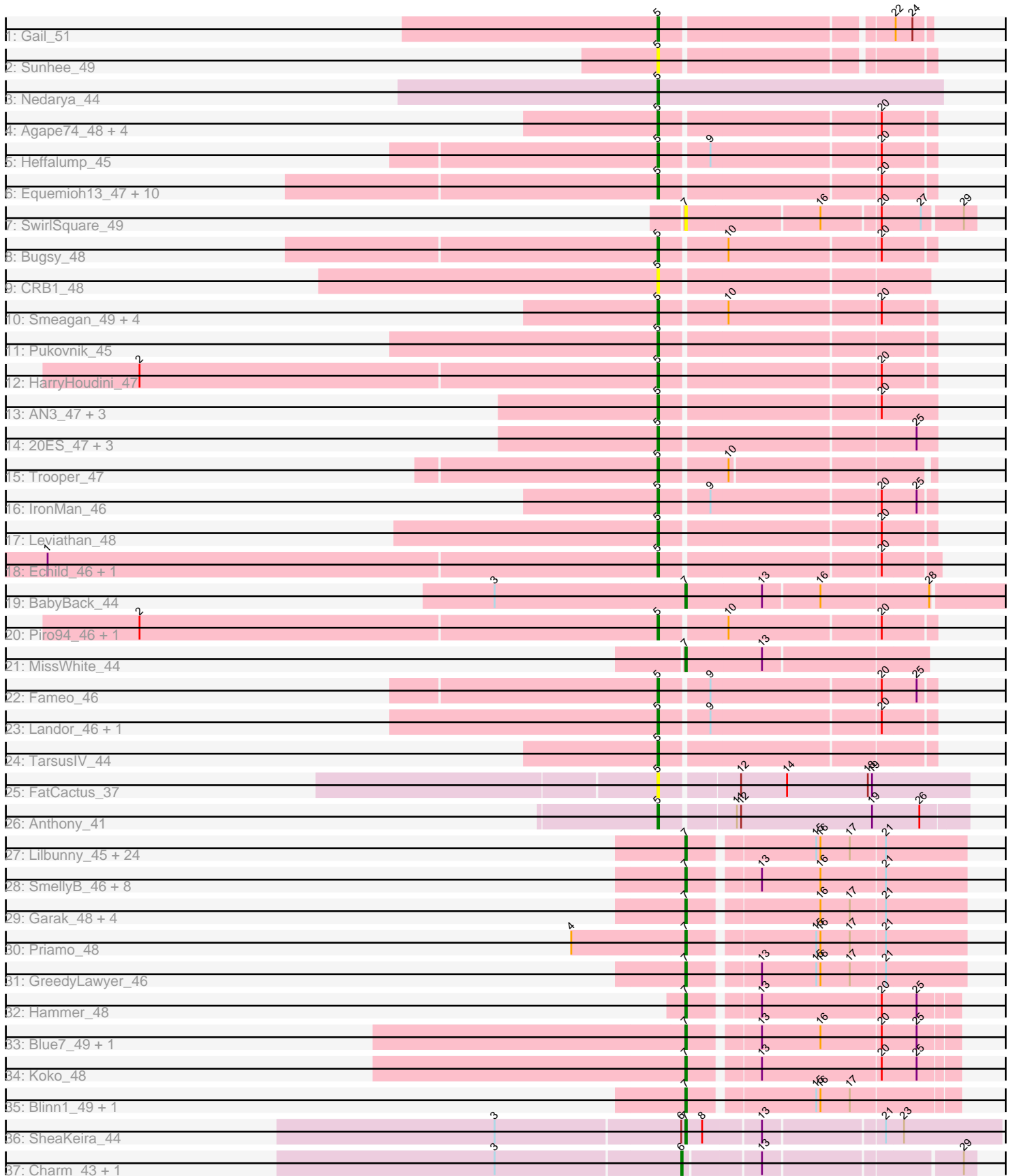


Pham 224460



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 224460 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224460 has 103 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Gail_51
- Track 2 : Sunhee_49
- Track 3 : Nedarya_44
- Track 4 : Agape74_48, Iwokeuplikedis_49, JoshKayV_48, Turbido_47, Jerm_48
- Track 5 : Heffalump_45
- Track 6 : Equemioh13_47, WideWale_47, MiculUcigas_46, Baehexic_45, Updawg_47, Centaur_47, Gratitude_46, NaSiaTalie_46, Sknot_48, Terrific_49, Flare16_46
- Track 7 : SwirlSquare_49
- Track 8 : Bugsy_48
- Track 9 : CRB1_48
- Track 10 : Smeagan_49, Dignity_48, AbbyPaige_48, Whabigail7_47, LilTurb_47
- Track 11 : Pukovnik_45
- Track 12 : HarryHoudini_47
- Track 13 : AN3_47, LadyBird_49, DudeLittle_45, VA6_45
- Track 14 : 20ES_47, First_0046, BengiVuitton_46, Deloris_45
- Track 15 : Trooper_47
- Track 16 : IronMan_46
- Track 17 : Leviathan_48
- Track 18 : Echild_46, Benvolio_43
- Track 19 : BabyBack_44
- Track 20 : Piro94_46, Drake55_48
- Track 21 : MissWhite_44
- Track 22 : Fameo_46
- Track 23 : Landor_46, Bactobuster_45
- Track 24 : TarsusIV_44
- Track 25 : FatCactus_37
- Track 26 : Anthony_41
- Track 27 : Lilbunny_45, Artemis2UCLA_46, ToneTone_43, Isiphiwo_44, Wiks_45, SuperAwesome_46, WunderPhul_46, Tucker_47, CloudWang3_46, Cookiedough_46, Newrala_46, Zaka_46, Roksolana_47, Pmask_46, Chartreuse_46, Yokurt_46, Neeharika16_46, JewelBug_48, BlessJoy_47, Zulu_47, DaVinci_46, Hexamo_46, Jeffabunny_46, Jordennis_46, Gruunaga_46
- Track 28 : SmellyB_46, Kipper29_46, Dorothea_46, VohminGhazi_46, Kazan_47, McFly_46, EricB_46, Hoot_46, Candra_46
- Track 29 : Garak_48, Temprado_48, Helmet_48, Indra_49, Polyphemos_47
- Track 30 : Priamo_48

- Track 31 : GreedyLawyer_46
- Track 32 : Hammer_48
- Track 33 : Blue7_49, Rifter_48
- Track 34 : Koko_48
- Track 35 : Blinn1_49, BABullseye_44
- Track 36 : SheaKeira_44
- Track 37 : Charm_43, DreamTeam1_43

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

The start number called the most often in the published annotations is 7, it was called in 43 of the 87 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_46, BABullseye_44, BabyBack_44, BlessJoy_47, Blinn1_49, Blue7_49, Candra_46, Chartreuse_46, CloudWang3_46, Cookiedough_46, DaVinci_46, Dorothea_46, EricB_46, Garak_48, GreedyLawyer_46, Gruunaga_46, Hammer_48, Helmet_48, Hexamo_46, Hoot_46, Indra_49, Isiphiwo_44, Jeffabunny_46, JewelBug_48, Jordennis_46, Kazan_47, Kipper29_46, Koko_48, Lilbunny_45, McFly_46, MissWhite_44, Neeharika16_46, Newrala_46, Pmask_46, Polyphemus_47, Priamo_48, Rifter_48, Roksolana_47, SheaKeira_44, SmellyB_46, SuperAwesome_46, SwirlSquare_49, Temprado_48, ToneTone_43, Tucker_47, VohminGhazi_46, Wiks_45, WunderPhul_46, Yokurt_46, Zaka_46, Zulu_47,

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

-

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

- 20ES_47, AN3_47, AbbyPaige_48, Agape74_48, Anthony_41, Bactobuster_45, Baehexic_45, BengiVuitton_46, Benvolio_43, Buggy_48, CRB1_48, Centaur_47, Charm_43, Deloris_45, Dignity_48, Drake55_48, DreamTeam1_43, DudeLittle_45, Echild_46, Equemioh13_47, Fameo_46, FatCactus_37, First_0046, Flare16_46, Gail_51, Gratitude_46, HarryHoudini_47, Heffalump_45, IronMan_46, Iwokeuplikedis_49, Jerm_48, JoshKayV_48, LadyBird_49, Landor_46, Leviathan_48, LilTurb_47, MiculUcigas_46, NaSiaTalie_46, Nedarya_44, Piro94_46, Pukovnik_45, Sknot_48, Smeagan_49, Sunhee_49, TarsusIV_44, Terrific_49, Trooper_47, Turbido_47, Updawg_47, VA6_45, Whabigail7_47, WideWale_47,

Summary by start number:

Start 5:

- Found in 50 of 103 (48.5%) of genes in pham
- Manual Annotations of this start: 42 of 87
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_47 (A2), AN3_47 (A2), AbbyPaige_48 (A2), Agape74_48 (A2), Anthony_41 (A20), Bactobuster_45 (A2), Baehexic_45 (A2), BengiVuitton_46 (A2), Benvolio_43 (A2), Buggy_48 (A2), CRB1_48 (A2), Centaur_47 (A2), Deloris_45 (A2), Dignity_48 (A2), Drake55_48 (A2), DudeLittle_45 (A2), Echild_46 (A2), Equemioh13_47 (A2), Fameo_46 (A2), FatCactus_37 (A20), First_0046 (A2), Flare16_46 (A2), Gail_51 (A14), Gratitude_46

(A2), HarryHoudini_47 (A2), Heffalump_45 (A2), IronMan_46 (A2), Iwokeuplikedis_49 (A2), Jerm_48 (A2), JoshKayV_48 (A2), LadyBird_49 (A2), Landor_46 (A2), Leviathan_48 (A2), LilTurb_47 (A2), MiculUcigas_46 (A2), NaSiaTalie_46 (A2), Nedarya_44 (A15), Piro94_46 (A2), Pukovnik_45 (A2), Sknot_48 (A2), Smeagan_49 (A2), Sunhee_49 (A14), TarsusIV_44 (A2), Terrific_49 (A2), Trooper_47 (A2), Turbido_47 (A2), Updawg_47 (A2), VA6_45 (A2), Whabigail7_47 (A2), WideWale_47 (A2),

Start 6:

- Found in 3 of 103 (2.9%) of genes in pham
- Manual Annotations of this start: 2 of 87
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Charm_43 (A9), DreamTeam1_43 (A9),

Start 7:

- Found in 51 of 103 (49.5%) of genes in pham
- Manual Annotations of this start: 43 of 87
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_46 (A6), BABullseye_44 (A6), BabyBack_44 (A2), BlessJoy_47 (A6), Blinn1_49 (A6), Blue7_49 (A6), Candra_46 (A6), Chartreuse_46 (A6), CloudWang3_46 (A6), Cookiedough_46 (A6), DaVinci_46 (A6), Dorothea_46 (A6), EricB_46 (A6), Garak_48 (A6), GreedyLawyer_46 (A6), Gruunaga_46 (A6), Hammer_48 (A6), Helmet_48 (A6), Hexamo_46 (A6), Hoot_46 (A6), Indra_49 (A6), Isiphiwo_44 (A6), Jeffabunny_46 (A6), JewelBug_48 (A6), Jordennis_46 (A6), Kazan_47 (A6), Kipper29_46 (A6), Koko_48 (A6), Lilbunny_45 (A6), McFly_46 (A6), MissWhite_44 (A2), Neeharika16_46 (A6), Newrala_46 (A6), Pmask_46 (A6), Polyphemus_47 (A6), Priamo_48 (A6), Rifter_48 (A6), Roksolana_47 (A6), SheaKeira_44 (A9), SmellyB_46 (A6), SuperAwesome_46 (A6), SwirlSquare_49 (A2), Temprado_48 (A6), ToneTone_43 (A6), Tucker_47 (A6), VohminGhazi_46 (A6), Wiks_45 (A6), WunderPhul_46 (A6), Yokurt_46 (A6), Zaka_46 (A6), Zulu_47 (A6),

Summary by clusters:

There are 6 clusters represented in this pham: A20, A14, A15, A2, A6, A9,

Info for manual annotations of cluster A14:

- Start number 5 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A15:

- Start number 5 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A2:

- Start number 5 was manually annotated 39 times for cluster A2.
- Start number 7 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 5 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A6:

- Start number 7 was manually annotated 40 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 6 was manually annotated 2 times for cluster A9.
- Start number 7 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: 20ES_47 Start: 31813, Stop: 31625, Start Num: 5

Candidate Starts for 20ES_47:

(Start: 5 @31813 has 42 MA's), (25, 31639),

Gene: AN3_47 Start: 32193, Stop: 32005, Start Num: 5

Candidate Starts for AN3_47:

(Start: 5 @32193 has 42 MA's), (20, 32043),

Gene: AbbyPaige_48 Start: 32194, Stop: 32009, Start Num: 5

Candidate Starts for AbbyPaige_48:

(Start: 5 @32194 has 42 MA's), (10, 32149), (20, 32044),

Gene: Agape74_48 Start: 32179, Stop: 31994, Start Num: 5

Candidate Starts for Agape74_48:

(Start: 5 @32179 has 42 MA's), (20, 32029),

Gene: Anthony_41 Start: 29481, Stop: 29272, Start Num: 5

Candidate Starts for Anthony_41:

(Start: 5 @29481 has 42 MA's), (11, 29433), (12, 29430), (19, 29337), (26, 29304),

Gene: Artemis2UCLA_46 Start: 29520, Stop: 29332, Start Num: 7

Candidate Starts for Artemis2UCLA_46:

(Start: 7 @29520 has 43 MA's), (15, 29436), (16, 29433), (17, 29412), (21, 29388),

Gene: BABullseye_44 Start: 29366, Stop: 29178, Start Num: 7

Candidate Starts for BABullseye_44:

(Start: 7 @29366 has 43 MA's), (15, 29282), (16, 29279), (17, 29258),

Gene: BabyBack_44 Start: 32081, Stop: 31851, Start Num: 7

Candidate Starts for BabyBack_44:

(3, 32216), (Start: 7 @32081 has 43 MA's), (13, 32027), (16, 31988), (28, 31913),

Gene: Bactobuster_45 Start: 32677, Stop: 32492, Start Num: 5

Candidate Starts for Bactobuster_45:

(Start: 5 @32677 has 42 MA's), (9, 32644), (20, 32527),

Gene: Baehexic_45 Start: 31869, Stop: 31684, Start Num: 5

Candidate Starts for Baehexic_45:

(Start: 5 @31869 has 42 MA's), (20, 31719),

Gene: BengiVuitton_46 Start: 31775, Stop: 31587, Start Num: 5

Candidate Starts for BengiVuitton_46:

(Start: 5 @31775 has 42 MA's), (25, 31601),

Gene: Benvolio_43 Start: 31141, Stop: 30953, Start Num: 5

Candidate Starts for Benvolio_43:

(1, 31576), (Start: 5 @31141 has 42 MA's), (20, 30991),

Gene: BlessJoy_47 Start: 29981, Stop: 29793, Start Num: 7

Candidate Starts for BlessJoy_47:

(Start: 7 @29981 has 43 MA's), (15, 29897), (16, 29894), (17, 29873), (21, 29849),

Gene: Blinn1_49 Start: 30331, Stop: 30152, Start Num: 7

Candidate Starts for Blinn1_49:

(Start: 7 @30331 has 43 MA's), (15, 30247), (16, 30244), (17, 30223),

Gene: Blue7_49 Start: 30167, Stop: 29988, Start Num: 7

Candidate Starts for Blue7_49:

(Start: 7 @30167 has 43 MA's), (13, 30122), (16, 30080), (20, 30038), (25, 30014),

Gene: Buggy_48 Start: 32239, Stop: 32054, Start Num: 5

Candidate Starts for Buggy_48:

(Start: 5 @32239 has 42 MA's), (10, 32194), (20, 32089),

Gene: CRB1_48 Start: 32159, Stop: 31977, Start Num: 5

Candidate Starts for CRB1_48:

(Start: 5 @32159 has 42 MA's),

Gene: Candra_46 Start: 29859, Stop: 29671, Start Num: 7

Candidate Starts for Candra_46:

(Start: 7 @29859 has 43 MA's), (13, 29814), (16, 29772), (21, 29727),

Gene: Centaur_47 Start: 32086, Stop: 31901, Start Num: 5

Candidate Starts for Centaur_47:

(Start: 5 @32086 has 42 MA's), (20, 31936),

Gene: Charm_43 Start: 31035, Stop: 30844, Start Num: 6

Candidate Starts for Charm_43:

(3, 31164), (Start: 6 @31035 has 2 MA's), (13, 30984), (29, 30852),

Gene: Chartreuse_46 Start: 29770, Stop: 29582, Start Num: 7

Candidate Starts for Chartreuse_46:

(Start: 7 @29770 has 43 MA's), (15, 29686), (16, 29683), (17, 29662), (21, 29638),

Gene: CloudWang3_46 Start: 29620, Stop: 29432, Start Num: 7

Candidate Starts for CloudWang3_46:

(Start: 7 @29620 has 43 MA's), (15, 29536), (16, 29533), (17, 29512), (21, 29488),

Gene: Cookiedough_46 Start: 29835, Stop: 29647, Start Num: 7

Candidate Starts for Cookiedough_46:

(Start: 7 @29835 has 43 MA's), (15, 29751), (16, 29748), (17, 29727), (21, 29703),

Gene: DaVinci_46 Start: 29824, Stop: 29636, Start Num: 7

Candidate Starts for DaVinci_46:

(Start: 7 @29824 has 43 MA's), (15, 29740), (16, 29737), (17, 29716), (21, 29692),

Gene: Deloris_45 Start: 31444, Stop: 31256, Start Num: 5

Candidate Starts for Deloris_45:

(Start: 5 @31444 has 42 MA's), (25, 31270),

Gene: Dignity_48 Start: 32259, Stop: 32074, Start Num: 5
Candidate Starts for Dignity_48:

(Start: 5 @32259 has 42 MA's), (10, 32214), (20, 32109),

Gene: Dorothea_46 Start: 29842, Stop: 29654, Start Num: 7

Candidate Starts for Dorothea_46:

(Start: 7 @29842 has 43 MA's), (13, 29797), (16, 29755), (21, 29710),

Gene: Drake55_48 Start: 32183, Stop: 31998, Start Num: 5

Candidate Starts for Drake55_48:

(2, 32552), (Start: 5 @32183 has 42 MA's), (10, 32138), (20, 32033),

Gene: DreamTeam1_43 Start: 30909, Stop: 30718, Start Num: 6

Candidate Starts for DreamTeam1_43:

(3, 31038), (Start: 6 @30909 has 2 MA's), (13, 30858), (29, 30726),

Gene: DudeLittle_45 Start: 31828, Stop: 31643, Start Num: 5

Candidate Starts for DudeLittle_45:

(Start: 5 @31828 has 42 MA's), (20, 31678),

Gene: Echild_46 Start: 31165, Stop: 30977, Start Num: 5

Candidate Starts for Echild_46:

(1, 31600), (Start: 5 @31165 has 42 MA's), (20, 31015),

Gene: Equemioh13_47 Start: 31988, Stop: 31803, Start Num: 5

Candidate Starts for Equemioh13_47:

(Start: 5 @31988 has 42 MA's), (20, 31838),

Gene: EricB_46 Start: 29816, Stop: 29628, Start Num: 7

Candidate Starts for EricB_46:

(Start: 7 @29816 has 43 MA's), (13, 29771), (16, 29729), (21, 29684),

Gene: Fameo_46 Start: 32004, Stop: 31819, Start Num: 5

Candidate Starts for Fameo_46:

(Start: 5 @32004 has 42 MA's), (9, 31971), (20, 31854), (25, 31830),

Gene: FatCactus_37 Start: 28563, Stop: 28351, Start Num: 5

Candidate Starts for FatCactus_37:

(Start: 5 @28563 has 42 MA's), (12, 28512), (14, 28479), (18, 28422), (19, 28419),

Gene: First_0046 Start: 31689, Stop: 31501, Start Num: 5

Candidate Starts for First_0046:

(Start: 5 @31689 has 42 MA's), (25, 31515),

Gene: Flare16_46 Start: 31747, Stop: 31562, Start Num: 5

Candidate Starts for Flare16_46:

(Start: 5 @31747 has 42 MA's), (20, 31597),

Gene: Gail_51 Start: 33528, Stop: 33352, Start Num: 5

Candidate Starts for Gail_51:

(Start: 5 @33528 has 42 MA's), (22, 33375), (24, 33363),

Gene: Garak_48 Start: 29987, Stop: 29799, Start Num: 7
Candidate Starts for Garak_48:
(Start: 7 @29987 has 43 MA's), (16, 29900), (17, 29879), (21, 29855),

Gene: Gratitude_46 Start: 31988, Stop: 31803, Start Num: 5
Candidate Starts for Gratitude_46:
(Start: 5 @31988 has 42 MA's), (20, 31838),

Gene: GreedyLawyer_46 Start: 29823, Stop: 29635, Start Num: 7
Candidate Starts for GreedyLawyer_46:
(Start: 7 @29823 has 43 MA's), (13, 29778), (15, 29739), (16, 29736), (17, 29715), (21, 29691),

Gene: Gruunaga_46 Start: 29823, Stop: 29635, Start Num: 7
Candidate Starts for Gruunaga_46:
(Start: 7 @29823 has 43 MA's), (15, 29739), (16, 29736), (17, 29715), (21, 29691),

Gene: Hammer_48 Start: 29977, Stop: 29798, Start Num: 7
Candidate Starts for Hammer_48:
(Start: 7 @29977 has 43 MA's), (13, 29932), (20, 29848), (25, 29824),

Gene: HarryHoudini_47 Start: 32192, Stop: 32007, Start Num: 5
Candidate Starts for HarryHoudini_47:
(2, 32561), (Start: 5 @32192 has 42 MA's), (20, 32042),

Gene: Heffalump_45 Start: 32472, Stop: 32287, Start Num: 5
Candidate Starts for Heffalump_45:
(Start: 5 @32472 has 42 MA's), (9, 32439), (20, 32322),

Gene: Helmet_48 Start: 29987, Stop: 29799, Start Num: 7
Candidate Starts for Helmet_48:
(Start: 7 @29987 has 43 MA's), (16, 29900), (17, 29879), (21, 29855),

Gene: Hexamo_46 Start: 29608, Stop: 29420, Start Num: 7
Candidate Starts for Hexamo_46:
(Start: 7 @29608 has 43 MA's), (15, 29524), (16, 29521), (17, 29500), (21, 29476),

Gene: Hoot_46 Start: 29801, Stop: 29613, Start Num: 7
Candidate Starts for Hoot_46:
(Start: 7 @29801 has 43 MA's), (13, 29756), (16, 29714), (21, 29669),

Gene: Indra_49 Start: 29988, Stop: 29800, Start Num: 7
Candidate Starts for Indra_49:
(Start: 7 @29988 has 43 MA's), (16, 29901), (17, 29880), (21, 29856),

Gene: IronMan_46 Start: 32860, Stop: 32675, Start Num: 5
Candidate Starts for IronMan_46:
(Start: 5 @32860 has 42 MA's), (9, 32827), (20, 32710), (25, 32686),

Gene: Isiphiwo_44 Start: 29360, Stop: 29172, Start Num: 7
Candidate Starts for Isiphiwo_44:
(Start: 7 @29360 has 43 MA's), (15, 29276), (16, 29273), (17, 29252), (21, 29228),

Gene: Iwokeuplikedis_49 Start: 31788, Stop: 31606, Start Num: 5

Candidate Starts for Iwokeuplikedis_49:
(Start: 5 @31788 has 42 MA's), (20, 31638),

Gene: Jeffabunny_46 Start: 29644, Stop: 29456, Start Num: 7
Candidate Starts for Jeffabunny_46:
(Start: 7 @29644 has 43 MA's), (15, 29560), (16, 29557), (17, 29536), (21, 29512),

Gene: Jerm_48 Start: 32252, Stop: 32067, Start Num: 5
Candidate Starts for Jerm_48:
(Start: 5 @32252 has 42 MA's), (20, 32102),

Gene: JewelBug_48 Start: 29992, Stop: 29804, Start Num: 7
Candidate Starts for JewelBug_48:
(Start: 7 @29992 has 43 MA's), (15, 29908), (16, 29905), (17, 29884), (21, 29860),

Gene: Jordennis_46 Start: 29831, Stop: 29643, Start Num: 7
Candidate Starts for Jordennis_46:
(Start: 7 @29831 has 43 MA's), (15, 29747), (16, 29744), (17, 29723), (21, 29699),

Gene: JoshKayV_48 Start: 32333, Stop: 32151, Start Num: 5
Candidate Starts for JoshKayV_48:
(Start: 5 @32333 has 42 MA's), (20, 32183),

Gene: Kazan_47 Start: 29829, Stop: 29641, Start Num: 7
Candidate Starts for Kazan_47:
(Start: 7 @29829 has 43 MA's), (13, 29784), (16, 29742), (21, 29697),

Gene: Kipper29_46 Start: 29842, Stop: 29654, Start Num: 7
Candidate Starts for Kipper29_46:
(Start: 7 @29842 has 43 MA's), (13, 29797), (16, 29755), (21, 29710),

Gene: Koko_48 Start: 30516, Stop: 30337, Start Num: 7
Candidate Starts for Koko_48:
(Start: 7 @30516 has 43 MA's), (13, 30471), (20, 30387), (25, 30363),

Gene: LadyBird_49 Start: 32124, Stop: 31936, Start Num: 5
Candidate Starts for LadyBird_49:
(Start: 5 @32124 has 42 MA's), (20, 31974),

Gene: Landor_46 Start: 32938, Stop: 32753, Start Num: 5
Candidate Starts for Landor_46:
(Start: 5 @32938 has 42 MA's), (9, 32905), (20, 32788),

Gene: Leviathan_48 Start: 32308, Stop: 32123, Start Num: 5
Candidate Starts for Leviathan_48:
(Start: 5 @32308 has 42 MA's), (20, 32158),

Gene: LilTurb_47 Start: 32141, Stop: 31956, Start Num: 5
Candidate Starts for LilTurb_47:
(Start: 5 @32141 has 42 MA's), (10, 32096), (20, 31991),

Gene: Lilbunny_45 Start: 29618, Stop: 29430, Start Num: 7
Candidate Starts for Lilbunny_45:

(Start: 7 @29618 has 43 MA's), (15, 29534), (16, 29531), (17, 29510), (21, 29486),

Gene: McFly_46 Start: 29823, Stop: 29635, Start Num: 7

Candidate Starts for McFly_46:

(Start: 7 @29823 has 43 MA's), (13, 29778), (16, 29736), (21, 29691),

Gene: MiculUcigas_46 Start: 31647, Stop: 31462, Start Num: 5

Candidate Starts for MiculUcigas_46:

(Start: 5 @31647 has 42 MA's), (20, 31497),

Gene: MissWhite_44 Start: 29921, Stop: 29754, Start Num: 7

Candidate Starts for MissWhite_44:

(Start: 7 @29921 has 43 MA's), (13, 29867),

Gene: NaSiaTalie_46 Start: 31744, Stop: 31559, Start Num: 5

Candidate Starts for NaSiaTalie_46:

(Start: 5 @31744 has 42 MA's), (20, 31594),

Gene: Nedarya_44 Start: 29716, Stop: 29513, Start Num: 5

Candidate Starts for Nedarya_44:

(Start: 5 @29716 has 42 MA's),

Gene: Neeharika16_46 Start: 29834, Stop: 29646, Start Num: 7

Candidate Starts for Neeharika16_46:

(Start: 7 @29834 has 43 MA's), (15, 29750), (16, 29747), (17, 29726), (21, 29702),

Gene: Newrala_46 Start: 29834, Stop: 29646, Start Num: 7

Candidate Starts for Newrala_46:

(Start: 7 @29834 has 43 MA's), (15, 29750), (16, 29747), (17, 29726), (21, 29702),

Gene: Piro94_46 Start: 32109, Stop: 31924, Start Num: 5

Candidate Starts for Piro94_46:

(2, 32478), (Start: 5 @32109 has 42 MA's), (10, 32064), (20, 31959),

Gene: Pmask_46 Start: 29835, Stop: 29647, Start Num: 7

Candidate Starts for Pmask_46:

(Start: 7 @29835 has 43 MA's), (15, 29751), (16, 29748), (17, 29727), (21, 29703),

Gene: Polyphemus_47 Start: 29978, Stop: 29790, Start Num: 7

Candidate Starts for Polyphemus_47:

(Start: 7 @29978 has 43 MA's), (16, 29891), (17, 29870), (21, 29846),

Gene: Priamo_48 Start: 30135, Stop: 29947, Start Num: 7

Candidate Starts for Priamo_48:

(4, 30213), (Start: 7 @30135 has 43 MA's), (15, 30051), (16, 30048), (17, 30027), (21, 30003),

Gene: Pukovnik_45 Start: 32528, Stop: 32343, Start Num: 5

Candidate Starts for Pukovnik_45:

(Start: 5 @32528 has 42 MA's),

Gene: Rifter_48 Start: 29940, Stop: 29761, Start Num: 7

Candidate Starts for Rifter_48:

(Start: 7 @29940 has 43 MA's), (13, 29895), (16, 29853), (20, 29811), (25, 29787),

Gene: Roksolana_47 Start: 29871, Stop: 29683, Start Num: 7

Candidate Starts for Roksolana_47:

(Start: 7 @29871 has 43 MA's), (15, 29787), (16, 29784), (17, 29763), (21, 29739),

Gene: SheaKeira_44 Start: 31011, Stop: 30799, Start Num: 7

Candidate Starts for SheaKeira_44:

(3, 31143), (Start: 6 @31014 has 2 MA's), (Start: 7 @31011 has 43 MA's), (8, 30999), (13, 30960), (21, 30879), (23, 30867),

Gene: Sknot_48 Start: 31747, Stop: 31562, Start Num: 5

Candidate Starts for Sknot_48:

(Start: 5 @31747 has 42 MA's), (20, 31597),

Gene: Smeagan_49 Start: 32395, Stop: 32210, Start Num: 5

Candidate Starts for Smeagan_49:

(Start: 5 @32395 has 42 MA's), (10, 32350), (20, 32245),

Gene: SmellyB_46 Start: 29823, Stop: 29635, Start Num: 7

Candidate Starts for SmellyB_46:

(Start: 7 @29823 has 43 MA's), (13, 29778), (16, 29736), (21, 29691),

Gene: Sunhee_49 Start: 31730, Stop: 31551, Start Num: 5

Candidate Starts for Sunhee_49:

(Start: 5 @31730 has 42 MA's),

Gene: SuperAwesome_46 Start: 29834, Stop: 29646, Start Num: 7

Candidate Starts for SuperAwesome_46:

(Start: 7 @29834 has 43 MA's), (15, 29750), (16, 29747), (17, 29726), (21, 29702),

Gene: SwirlSquare_49 Start: 30451, Stop: 30257, Start Num: 7

Candidate Starts for SwirlSquare_49:

(Start: 7 @30451 has 43 MA's), (16, 30358), (20, 30319), (27, 30292), (29, 30265),

Gene: TarsusIV_44 Start: 31542, Stop: 31357, Start Num: 5

Candidate Starts for TarsusIV_44:

(Start: 5 @31542 has 42 MA's),

Gene: Temprado_48 Start: 29987, Stop: 29799, Start Num: 7

Candidate Starts for Temprado_48:

(Start: 7 @29987 has 43 MA's), (16, 29900), (17, 29879), (21, 29855),

Gene: Terrific_49 Start: 32101, Stop: 31916, Start Num: 5

Candidate Starts for Terrific_49:

(Start: 5 @32101 has 42 MA's), (20, 31951),

Gene: ToneTone_43 Start: 29550, Stop: 29362, Start Num: 7

Candidate Starts for ToneTone_43:

(Start: 7 @29550 has 43 MA's), (15, 29466), (16, 29463), (17, 29442), (21, 29418),

Gene: Trooper_47 Start: 32104, Stop: 31925, Start Num: 5

Candidate Starts for Trooper_47:

(Start: 5 @32104 has 42 MA's), (10, 32059),

Gene: Tucker_47 Start: 29988, Stop: 29800, Start Num: 7
Candidate Starts for Tucker_47:
(Start: 7 @29988 has 43 MA's), (15, 29904), (16, 29901), (17, 29880), (21, 29856),

Gene: Turbido_47 Start: 32138, Stop: 31950, Start Num: 5
Candidate Starts for Turbido_47:
(Start: 5 @32138 has 42 MA's), (20, 31988),

Gene: Updawg_47 Start: 31988, Stop: 31803, Start Num: 5
Candidate Starts for Updawg_47:
(Start: 5 @31988 has 42 MA's), (20, 31838),

Gene: VA6_45 Start: 31667, Stop: 31479, Start Num: 5
Candidate Starts for VA6_45:
(Start: 5 @31667 has 42 MA's), (20, 31517),

Gene: VohminGhazi_46 Start: 29824, Stop: 29636, Start Num: 7
Candidate Starts for VohminGhazi_46:
(Start: 7 @29824 has 43 MA's), (13, 29779), (16, 29737), (21, 29692),

Gene: Whabigail7_47 Start: 32123, Stop: 31938, Start Num: 5
Candidate Starts for Whabigail7_47:
(Start: 5 @32123 has 42 MA's), (10, 32078), (20, 31973),

Gene: WideWale_47 Start: 31988, Stop: 31803, Start Num: 5
Candidate Starts for WideWale_47:
(Start: 5 @31988 has 42 MA's), (20, 31838),

Gene: Wiks_45 Start: 29618, Stop: 29430, Start Num: 7
Candidate Starts for Wiks_45:
(Start: 7 @29618 has 43 MA's), (15, 29534), (16, 29531), (17, 29510), (21, 29486),

Gene: WunderPhul_46 Start: 29616, Stop: 29428, Start Num: 7
Candidate Starts for WunderPhul_46:
(Start: 7 @29616 has 43 MA's), (15, 29532), (16, 29529), (17, 29508), (21, 29484),

Gene: Yokurt_46 Start: 29618, Stop: 29430, Start Num: 7
Candidate Starts for Yokurt_46:
(Start: 7 @29618 has 43 MA's), (15, 29534), (16, 29531), (17, 29510), (21, 29486),

Gene: Zaka_46 Start: 29618, Stop: 29430, Start Num: 7
Candidate Starts for Zaka_46:
(Start: 7 @29618 has 43 MA's), (15, 29534), (16, 29531), (17, 29510), (21, 29486),

Gene: Zulu_47 Start: 29969, Stop: 29781, Start Num: 7
Candidate Starts for Zulu_47:
(Start: 7 @29969 has 43 MA's), (15, 29885), (16, 29882), (17, 29861), (21, 29837),