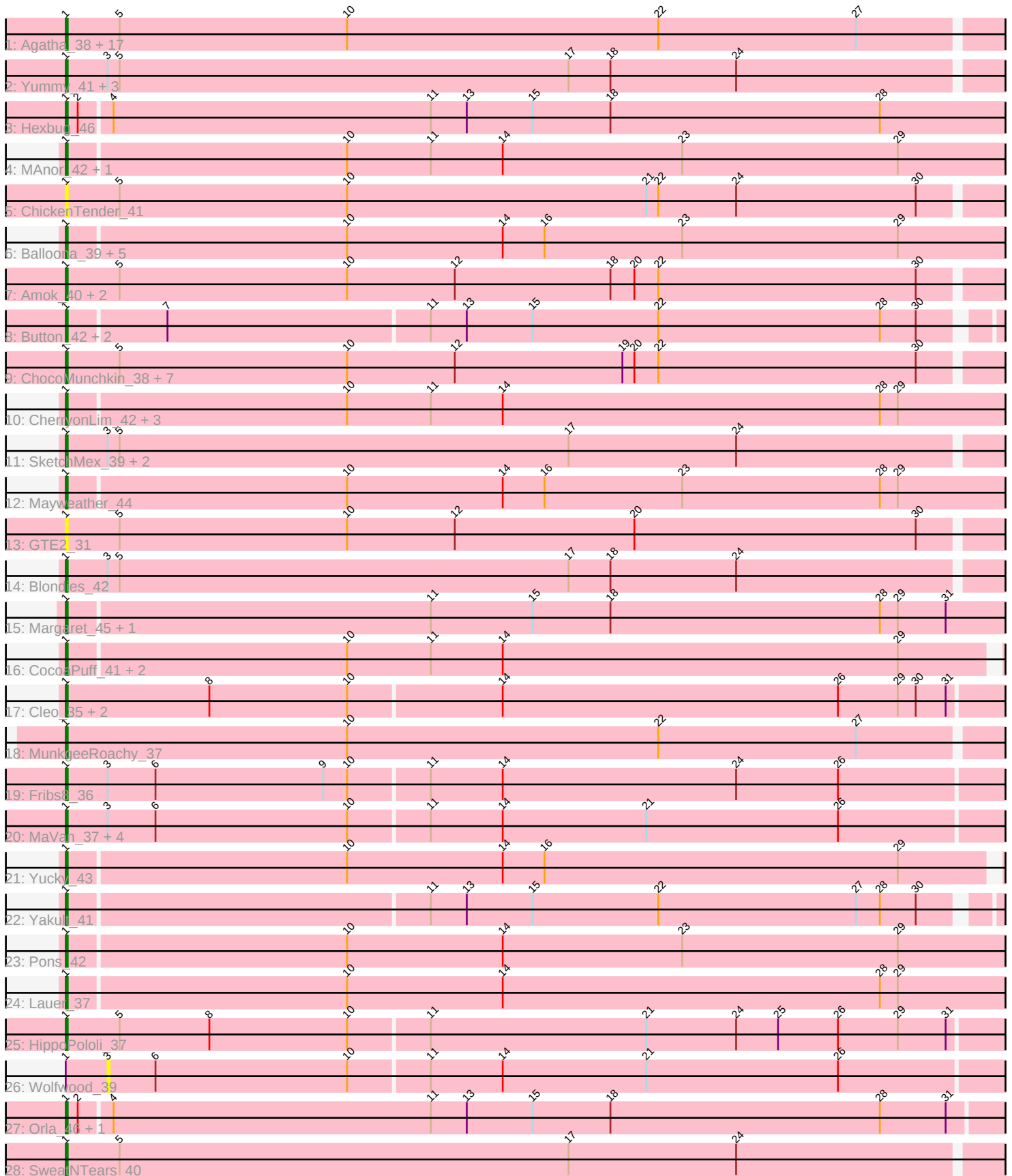


Pham 261411



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 261411 Report

This analysis was run 02/07/26 on database version 634.

Pham number 261411 has 80 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Agatha_38, RSchmailzl_40, Elliott_39, Nina_38, Cozz_37, Quasar_39, Bubble_37, RedBaron_41, PsychoKiller_38, Sopespian_38, Typhonomachy_37, Axym_38, RADical_40, GoldHunter_40, Burnsey_38, Carsonalex_42, Socotra_40, Starburst_40
- Track 2 : Yummy_41, Buttrmlkdreams_41, MScarn_42, Horseradish_41
- Track 3 : Hexbug_46
- Track 4 : MAnor_42, PotPie_41
- Track 5 : ChickenTender_41
- Track 6 : Balloona_39, Elinal_44, KayGee_42, Vine_43, Bavidard_40, SummitAcademy_40
- Track 7 : Amok_40, AikoCarson_40, Emalyn_39
- Track 8 : Button_42, GiKK_44, Jamzy_44
- Track 9 : ChocoMunchkin_38, Yarn_36, Tolls_40, CanesSauce_38, BillDoor_39, AndPeggy_36, SteamedHams_40, CaramelLatte_38
- Track 10 : CherryonLim_42, ElJefes_41, SheckWes_43, McDazzle_42
- Track 11 : SketchMex_39, Troje_41, Biskit_41
- Track 12 : Mayweather_44
- Track 13 : GTE2_31
- Track 14 : Blondies_42
- Track 15 : Margaret_45, RanchParmCat_44
- Track 16 : CocoaPuff_41, Feastonyeet_40, BigChungus_40
- Track 17 : Cleo_35, Gibbous_35, Dre3_35
- Track 18 : MunkgeeRoachy_37
- Track 19 : Fribs8_36
- Track 20 : MaVan_37, Nibbles_36, Zareef_37, Survivors_37, Azira_37
- Track 21 : Yucky_43
- Track 22 : Yakult_41
- Track 23 : Pons_42
- Track 24 : Lauer_37
- Track 25 : HippoPololi_37
- Track 26 : Wolfwood_39
- Track 27 : Orla_46, Nodigi_46
- Track 28 : SweatNTears_40

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

The start number called the most often in the published annotations is 1, it was called in 59 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_38, AikoCarson_40, Amok_40, AndPeggy_36, Axym_38, Azira_37, Balloona_39, Bavidard_40, BigChungus_40, BillDoor_39, Biskit_41, Blondies_42, Bubble_37, Burnsey_38, Button_42, Buttrmlkdreams_41, CanesSauce_38, CaramelLatte_38, Carsonalex_42, CherryonLim_42, ChickenTender_41, ChocoMunchkin_38, Cleo_35, CocoaPuff_41, Cozz_37, Dre3_35, ElJefes_41, Elinal_44, Elliott_39, Emalyn_39, Feastonyeet_40, Fribs8_36, GTE2_31, GiKK_44, Gibbous_35, GoldHunter_40, Hexbug_46, HippoPololi_37, Horseradish_41, Jamzy_44, KayGee_42, Lauer_37, MAnor_42, MScarn_42, MaVan_37, Margaret_45, Mayweather_44, McDazzle_42, MunkgeeRoachy_37, Nibbles_36, Nina_38, Nodigi_46, Orla_46, Pons_42, PotPie_41, PsychoKiller_38, Quasar_39, RADical_40, RSchmailzl_40, RanchParmCat_44, RedBaron_41, SheckWes_43, SketchMex_39, Socotra_40, Sopespian_38, Starburst_40, SteamedHams_40, SummitAcademy_40, Survivors_37, SweatNTears_40, Tolls_40, Troje_41, Typhonomachy_37, Vine_43, Yakult_41, Yarn_36, Yucky_43, Yummy_41, Zareef_37,

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

- Wolfwood_39,

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

-

Summary by start number:

Start 1:

- Found in 80 of 80 (100.0%) of genes in pham
- Manual Annotations of this start: 59 of 59
- Called 98.8% of time when present
- Phage (with cluster) where this start called: Agatha_38 (CT), AikoCarson_40 (CT), Amok_40 (CT), AndPeggy_36 (CT), Axym_38 (CT), Azira_37 (CT), Balloona_39 (CT), Bavidard_40 (CT), BigChungus_40 (CT), BillDoor_39 (CT), Biskit_41 (CT), Blondies_42 (CT), Bubble_37 (CT), Burnsey_38 (CT), Button_42 (CT), Buttrmlkdreams_41 (CT), CanesSauce_38 (CT), CaramelLatte_38 (CT), Carsonalex_42 (CT), CherryonLim_42 (CT), ChickenTender_41 (CT), ChocoMunchkin_38 (CT), Cleo_35 (CT), CocoaPuff_41 (CT), Cozz_37 (CT), Dre3_35 (CT), ElJefes_41 (CT), Elinal_44 (CT), Elliott_39 (CT), Emalyn_39 (CT), Feastonyeet_40 (CT), Fribs8_36 (CT), GTE2_31 (CT), GiKK_44 (CT), Gibbous_35 (CT), GoldHunter_40 (CT), Hexbug_46 (CT), HippoPololi_37 (CT), Horseradish_41 (CT), Jamzy_44 (CT), KayGee_42 (CT), Lauer_37 (CT), MAnor_42 (CT), MScarn_42 (CT), MaVan_37 (CT), Margaret_45 (CT), Mayweather_44 (CT), McDazzle_42 (CT), MunkgeeRoachy_37 (CT), Nibbles_36 (CT), Nina_38 (CT), Nodigi_46 (CT), Orla_46 (CT), Pons_42 (CT), PotPie_41 (CT), PsychoKiller_38 (CT), Quasar_39 (CT), RADical_40 (CT), RSchmailzl_40 (CT), RanchParmCat_44 (CT), RedBaron_41 (CT), SheckWes_43 (CT), SketchMex_39 (CT), Socotra_40 (CT), Sopespian_38 (CT), Starburst_40 (CT), SteamedHams_40 (CT), SummitAcademy_40 (CT), Survivors_37 (CT), SweatNTears_40 (CT), Tolls_40 (CT), Troje_41 (CT), Typhonomachy_37 (CT), Vine_43 (CT), Yakult_41 (CT), Yarn_36 (CT), Yucky_43 (CT), Yummy_41 (CT), Zareef_37 (CT),

Start 3:

- Found in 15 of 80 (18.8%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Wolfwood_39 (CT),

Summary by clusters:

There is one cluster represented in this pham: CT

Info for manual annotations of cluster CT:

- Start number 1 was manually annotated 59 times for cluster CT.

Gene Information:

Gene: Agatha_38 Start: 27790, Stop: 27239, Start Num: 1

Candidate Starts for Agatha_38:

(Start: 1 @27790 has 59 MA's), (5, 27763), (10, 27649), (22, 27493), (27, 27394),

Gene: AikoCarson_40 Start: 28146, Stop: 27598, Start Num: 1

Candidate Starts for AikoCarson_40:

(Start: 1 @28146 has 59 MA's), (5, 28119), (10, 28005), (12, 27951), (18, 27873), (20, 27861), (22, 27849), (30, 27720),

Gene: Amok_40 Start: 28170, Stop: 27622, Start Num: 1

Candidate Starts for Amok_40:

(Start: 1 @28170 has 59 MA's), (5, 28143), (10, 28029), (12, 27975), (18, 27897), (20, 27885), (22, 27873), (30, 27744),

Gene: AndPeggy_36 Start: 27570, Stop: 27022, Start Num: 1

Candidate Starts for AndPeggy_36:

(Start: 1 @27570 has 59 MA's), (5, 27543), (10, 27429), (12, 27375), (19, 27291), (20, 27285), (22, 27273), (30, 27144),

Gene: Axym_38 Start: 27768, Stop: 27217, Start Num: 1

Candidate Starts for Axym_38:

(Start: 1 @27768 has 59 MA's), (5, 27741), (10, 27627), (22, 27471), (27, 27372),

Gene: Azira_37 Start: 27822, Stop: 27271, Start Num: 1

Candidate Starts for Azira_37:

(Start: 1 @27822 has 59 MA's), (3, 27801), (6, 27777), (10, 27681), (11, 27642), (14, 27606), (21, 27534), (26, 27438),

Gene: Balloona_39 Start: 28980, Stop: 28381, Start Num: 1

Candidate Starts for Balloona_39:

(Start: 1 @28980 has 59 MA's), (10, 28842), (14, 28764), (16, 28743), (23, 28674), (29, 28566),

Gene: Bavilard_40 Start: 29201, Stop: 28599, Start Num: 1

Candidate Starts for Bavilard_40:

(Start: 1 @29201 has 59 MA's), (10, 29063), (14, 28985), (16, 28964), (23, 28895), (29, 28787),

Gene: BigChungus_40 Start: 29381, Stop: 28782, Start Num: 1
Candidate Starts for BigChungus_40:
(Start: 1 @29381 has 59 MA's), (10, 29243), (11, 29201), (14, 29165), (29, 28967),

Gene: BillDoor_39 Start: 27241, Stop: 26699, Start Num: 1
Candidate Starts for BillDoor_39:
(Start: 1 @27241 has 59 MA's), (5, 27214), (10, 27100), (12, 27046), (19, 26962), (20, 26956), (22, 26944), (30, 26815),

Gene: Biskit_41 Start: 27935, Stop: 27390, Start Num: 1
Candidate Starts for Biskit_41:
(Start: 1 @27935 has 59 MA's), (3, 27914), (5, 27908), (17, 27683), (24, 27599),

Gene: Blondies_42 Start: 28251, Stop: 27706, Start Num: 1
Candidate Starts for Blondies_42:
(Start: 1 @28251 has 59 MA's), (3, 28230), (5, 28224), (17, 27999), (18, 27978), (24, 27915),

Gene: Bubble_37 Start: 27377, Stop: 26826, Start Num: 1
Candidate Starts for Bubble_37:
(Start: 1 @27377 has 59 MA's), (5, 27350), (10, 27236), (22, 27080), (27, 26981),

Gene: Burnsey_38 Start: 27781, Stop: 27230, Start Num: 1
Candidate Starts for Burnsey_38:
(Start: 1 @27781 has 59 MA's), (5, 27754), (10, 27640), (22, 27484), (27, 27385),

Gene: Button_42 Start: 28421, Stop: 27879, Start Num: 1
Candidate Starts for Button_42:
(Start: 1 @28421 has 59 MA's), (7, 28373), (11, 28244), (13, 28226), (15, 28193), (22, 28130), (28, 28019), (30, 28001),

Gene: Buttrmlkdreams_41 Start: 28267, Stop: 27722, Start Num: 1
Candidate Starts for Buttrmlkdreams_41:
(Start: 1 @28267 has 59 MA's), (3, 28246), (5, 28240), (17, 28015), (18, 27994), (24, 27931),

Gene: CanesSauce_38 Start: 27743, Stop: 27195, Start Num: 1
Candidate Starts for CanesSauce_38:
(Start: 1 @27743 has 59 MA's), (5, 27716), (10, 27602), (12, 27548), (19, 27464), (20, 27458), (22, 27446), (30, 27317),

Gene: CaramellLatte_38 Start: 27743, Stop: 27195, Start Num: 1
Candidate Starts for CaramellLatte_38:
(Start: 1 @27743 has 59 MA's), (5, 27716), (10, 27602), (12, 27548), (19, 27464), (20, 27458), (22, 27446), (30, 27317),

Gene: Carsonalex_42 Start: 27818, Stop: 27267, Start Num: 1
Candidate Starts for Carsonalex_42:
(Start: 1 @27818 has 59 MA's), (5, 27791), (10, 27677), (22, 27521), (27, 27422),

Gene: CherryonLim_42 Start: 30519, Stop: 29932, Start Num: 1
Candidate Starts for CherryonLim_42:
(Start: 1 @30519 has 59 MA's), (10, 30381), (11, 30339), (14, 30303), (28, 30114), (29, 30105),

Gene: ChickenTender_41 Start: 27551, Stop: 27003, Start Num: 1

Candidate Starts for ChickenTender_41:

(Start: 1 @27551 has 59 MA's), (5, 27524), (10, 27410), (21, 27260), (22, 27254), (24, 27215), (30, 27125),

Gene: ChocoMunchkin_38 Start: 27743, Stop: 27195, Start Num: 1

Candidate Starts for ChocoMunchkin_38:

(Start: 1 @27743 has 59 MA's), (5, 27716), (10, 27602), (12, 27548), (19, 27464), (20, 27458), (22, 27446), (30, 27317),

Gene: Cleo_35 Start: 27367, Stop: 26819, Start Num: 1

Candidate Starts for Cleo_35:

(Start: 1 @27367 has 59 MA's), (8, 27295), (10, 27226), (14, 27151), (26, 26983), (29, 26953), (30, 26944), (31, 26929),

Gene: CocoaPuff_41 Start: 29386, Stop: 28796, Start Num: 1

Candidate Starts for CocoaPuff_41:

(Start: 1 @29386 has 59 MA's), (10, 29248), (11, 29206), (14, 29170), (29, 28972),

Gene: Cozz_37 Start: 27378, Stop: 26827, Start Num: 1

Candidate Starts for Cozz_37:

(Start: 1 @27378 has 59 MA's), (5, 27351), (10, 27237), (22, 27081), (27, 26982),

Gene: Dre3_35 Start: 27110, Stop: 26562, Start Num: 1

Candidate Starts for Dre3_35:

(Start: 1 @27110 has 59 MA's), (8, 27038), (10, 26969), (14, 26894), (26, 26726), (29, 26696), (30, 26687), (31, 26672),

Gene: ElJefes_41 Start: 29726, Stop: 29121, Start Num: 1

Candidate Starts for ElJefes_41:

(Start: 1 @29726 has 59 MA's), (10, 29588), (11, 29546), (14, 29510), (28, 29321), (29, 29312),

Gene: Elinal_44 Start: 29769, Stop: 29167, Start Num: 1

Candidate Starts for Elinal_44:

(Start: 1 @29769 has 59 MA's), (10, 29631), (14, 29553), (16, 29532), (23, 29463), (29, 29355),

Gene: Eliott_39 Start: 27789, Stop: 27238, Start Num: 1

Candidate Starts for Eliott_39:

(Start: 1 @27789 has 59 MA's), (5, 27762), (10, 27648), (22, 27492), (27, 27393),

Gene: Emalyn_39 Start: 27338, Stop: 26793, Start Num: 1

Candidate Starts for Emalyn_39:

(Start: 1 @27338 has 59 MA's), (5, 27311), (10, 27197), (12, 27143), (18, 27065), (20, 27053), (22, 27041), (30, 26912),

Gene: Feastonyeet_40 Start: 29381, Stop: 28782, Start Num: 1

Candidate Starts for Feastonyeet_40:

(Start: 1 @29381 has 59 MA's), (10, 29243), (11, 29201), (14, 29165), (29, 28967),

Gene: Fribs8_36 Start: 27549, Stop: 26995, Start Num: 1

Candidate Starts for Fribs8_36:

(Start: 1 @27549 has 59 MA's), (3, 27528), (6, 27504), (9, 27420), (10, 27408), (11, 27369), (14, 27333), (24, 27216), (26, 27165),

Gene: GTE2_31 Start: 27554, Stop: 27012, Start Num: 1

Candidate Starts for GTE2_31:

(Start: 1 @27554 has 59 MA's), (5, 27527), (10, 27413), (12, 27359), (20, 27269), (30, 27128),

Gene: GiKK_44 Start: 28751, Stop: 28209, Start Num: 1

Candidate Starts for GiKK_44:

(Start: 1 @28751 has 59 MA's), (7, 28703), (11, 28574), (13, 28556), (15, 28523), (22, 28460), (28, 28349), (30, 28331),

Gene: Gibbous_35 Start: 27110, Stop: 26562, Start Num: 1

Candidate Starts for Gibbous_35:

(Start: 1 @27110 has 59 MA's), (8, 27038), (10, 26969), (14, 26894), (26, 26726), (29, 26696), (30, 26687), (31, 26672),

Gene: GoldHunter_40 Start: 27790, Stop: 27239, Start Num: 1

Candidate Starts for GoldHunter_40:

(Start: 1 @27790 has 59 MA's), (5, 27763), (10, 27649), (22, 27493), (27, 27394),

Gene: Hexbug_46 Start: 30533, Stop: 29970, Start Num: 1

Candidate Starts for Hexbug_46:

(Start: 1 @30533 has 59 MA's), (2, 30527), (4, 30512), (11, 30353), (13, 30335), (15, 30302), (18, 30263), (28, 30128),

Gene: HippoPololi_37 Start: 27564, Stop: 27016, Start Num: 1

Candidate Starts for HippoPololi_37:

(Start: 1 @27564 has 59 MA's), (5, 27537), (8, 27492), (10, 27423), (11, 27384), (21, 27276), (24, 27231), (25, 27210), (26, 27180), (29, 27150), (31, 27126),

Gene: Horseradish_41 Start: 27795, Stop: 27250, Start Num: 1

Candidate Starts for Horseradish_41:

(Start: 1 @27795 has 59 MA's), (3, 27774), (5, 27768), (17, 27543), (18, 27522), (24, 27459),

Gene: Jamzy_44 Start: 28734, Stop: 28192, Start Num: 1

Candidate Starts for Jamzy_44:

(Start: 1 @28734 has 59 MA's), (7, 28686), (11, 28557), (13, 28539), (15, 28506), (22, 28443), (28, 28332), (30, 28314),

Gene: KayGee_42 Start: 29769, Stop: 29167, Start Num: 1

Candidate Starts for KayGee_42:

(Start: 1 @29769 has 59 MA's), (10, 29631), (14, 29553), (16, 29532), (23, 29463), (29, 29355),

Gene: Lauer_37 Start: 30578, Stop: 29997, Start Num: 1

Candidate Starts for Lauer_37:

(Start: 1 @30578 has 59 MA's), (10, 30440), (14, 30362), (28, 30173), (29, 30164),

Gene: MAnor_42 Start: 30111, Stop: 29515, Start Num: 1

Candidate Starts for MAnor_42:

(Start: 1 @30111 has 59 MA's), (10, 29973), (11, 29931), (14, 29895), (23, 29805), (29, 29697),

Gene: MScarn_42 Start: 27935, Stop: 27390, Start Num: 1

Candidate Starts for MScarn_42:

(Start: 1 @27935 has 59 MA's), (3, 27914), (5, 27908), (17, 27683), (18, 27662), (24, 27599),

Gene: MaVan_37 Start: 27851, Stop: 27303, Start Num: 1

Candidate Starts for MaVan_37:

(Start: 1 @27851 has 59 MA's), (3, 27830), (6, 27806), (10, 27710), (11, 27671), (14, 27635), (21, 27563), (26, 27467),

Gene: Margaret_45 Start: 29479, Stop: 28916, Start Num: 1

Candidate Starts for Margaret_45:

(Start: 1 @29479 has 59 MA's), (11, 29299), (15, 29248), (18, 29209), (28, 29074), (29, 29065), (31, 29041),

Gene: Mayweather_44 Start: 30390, Stop: 29791, Start Num: 1

Candidate Starts for Mayweather_44:

(Start: 1 @30390 has 59 MA's), (10, 30252), (14, 30174), (16, 30153), (23, 30084), (28, 29985), (29, 29976),

Gene: McDazzle_42 Start: 29720, Stop: 29115, Start Num: 1

Candidate Starts for McDazzle_42:

(Start: 1 @29720 has 59 MA's), (10, 29582), (11, 29540), (14, 29504), (28, 29315), (29, 29306),

Gene: MunkgeeRoachy_37 Start: 27252, Stop: 26701, Start Num: 1

Candidate Starts for MunkgeeRoachy_37:

(Start: 1 @27252 has 59 MA's), (10, 27111), (22, 26955), (27, 26856),

Gene: Nibbles_36 Start: 27538, Stop: 26987, Start Num: 1

Candidate Starts for Nibbles_36:

(Start: 1 @27538 has 59 MA's), (3, 27517), (6, 27493), (10, 27397), (11, 27358), (14, 27322), (21, 27250), (26, 27154),

Gene: Nina_38 Start: 27914, Stop: 27363, Start Num: 1

Candidate Starts for Nina_38:

(Start: 1 @27914 has 59 MA's), (5, 27887), (10, 27773), (22, 27617), (27, 27518),

Gene: Nodigi_46 Start: 30519, Stop: 29959, Start Num: 1

Candidate Starts for Nodigi_46:

(Start: 1 @30519 has 59 MA's), (2, 30513), (4, 30498), (11, 30339), (13, 30321), (15, 30288), (18, 30249), (28, 30114), (31, 30081),

Gene: Orla_46 Start: 30492, Stop: 29932, Start Num: 1

Candidate Starts for Orla_46:

(Start: 1 @30492 has 59 MA's), (2, 30486), (4, 30471), (11, 30312), (13, 30294), (15, 30261), (18, 30222), (28, 30087), (31, 30054),

Gene: Pons_42 Start: 29741, Stop: 29139, Start Num: 1

Candidate Starts for Pons_42:

(Start: 1 @29741 has 59 MA's), (10, 29603), (14, 29525), (23, 29435), (29, 29327),

Gene: PotPie_41 Start: 30672, Stop: 30073, Start Num: 1

Candidate Starts for PotPie_41:

(Start: 1 @30672 has 59 MA's), (10, 30534), (11, 30492), (14, 30456), (23, 30366), (29, 30258),

Gene: PsychoKiller_38 Start: 27790, Stop: 27239, Start Num: 1

Candidate Starts for PsychoKiller_38:

(Start: 1 @27790 has 59 MA's), (5, 27763), (10, 27649), (22, 27493), (27, 27394),

Gene: Quasar_39 Start: 28338, Stop: 27787, Start Num: 1

Candidate Starts for Quasar_39:

(Start: 1 @28338 has 59 MA's), (5, 28311), (10, 28197), (22, 28041), (27, 27942),

Gene: RADical_40 Start: 27784, Stop: 27233, Start Num: 1

Candidate Starts for RADical_40:

(Start: 1 @27784 has 59 MA's), (5, 27757), (10, 27643), (22, 27487), (27, 27388),

Gene: RSchmailzl_40 Start: 27827, Stop: 27276, Start Num: 1

Candidate Starts for RSchmailzl_40:

(Start: 1 @27827 has 59 MA's), (5, 27800), (10, 27686), (22, 27530), (27, 27431),

Gene: RanchParmCat_44 Start: 29617, Stop: 29066, Start Num: 1

Candidate Starts for RanchParmCat_44:

(Start: 1 @29617 has 59 MA's), (11, 29437), (15, 29386), (18, 29347), (28, 29212), (29, 29203), (31, 29179),

Gene: RedBaron_41 Start: 28027, Stop: 27476, Start Num: 1

Candidate Starts for RedBaron_41:

(Start: 1 @28027 has 59 MA's), (5, 28000), (10, 27886), (22, 27730), (27, 27631),

Gene: SheckWes_43 Start: 29265, Stop: 28660, Start Num: 1

Candidate Starts for SheckWes_43:

(Start: 1 @29265 has 59 MA's), (10, 29127), (11, 29085), (14, 29049), (28, 28860), (29, 28851),

Gene: SketchMex_39 Start: 27935, Stop: 27390, Start Num: 1

Candidate Starts for SketchMex_39:

(Start: 1 @27935 has 59 MA's), (3, 27914), (5, 27908), (17, 27683), (24, 27599),

Gene: Socotra_40 Start: 27789, Stop: 27238, Start Num: 1

Candidate Starts for Socotra_40:

(Start: 1 @27789 has 59 MA's), (5, 27762), (10, 27648), (22, 27492), (27, 27393),

Gene: Sopespian_38 Start: 27791, Stop: 27240, Start Num: 1

Candidate Starts for Sopespian_38:

(Start: 1 @27791 has 59 MA's), (5, 27764), (10, 27650), (22, 27494), (27, 27395),

Gene: Starburst_40 Start: 27784, Stop: 27233, Start Num: 1

Candidate Starts for Starburst_40:

(Start: 1 @27784 has 59 MA's), (5, 27757), (10, 27643), (22, 27487), (27, 27388),

Gene: SteamedHams_40 Start: 27710, Stop: 27168, Start Num: 1

Candidate Starts for SteamedHams_40:

(Start: 1 @27710 has 59 MA's), (5, 27683), (10, 27569), (12, 27515), (19, 27431), (20, 27425), (22, 27413), (30, 27284),

Gene: SummitAcademy_40 Start: 29301, Stop: 28702, Start Num: 1

Candidate Starts for SummitAcademy_40:

(Start: 1 @29301 has 59 MA's), (10, 29163), (14, 29085), (16, 29064), (23, 28995), (29, 28887),

Gene: Survivors_37 Start: 27747, Stop: 27196, Start Num: 1

Candidate Starts for Survivors_37:

(Start: 1 @27747 has 59 MA's), (3, 27726), (6, 27702), (10, 27606), (11, 27567), (14, 27531), (21, 27459), (26, 27363),

Gene: SweatNTears_40 Start: 27687, Stop: 27136, Start Num: 1

Candidate Starts for SweatNTears_40:

(Start: 1 @27687 has 59 MA's), (5, 27660), (17, 27435), (24, 27351),

Gene: Tolls_40 Start: 27815, Stop: 27267, Start Num: 1

Candidate Starts for Tolls_40:

(Start: 1 @27815 has 59 MA's), (5, 27788), (10, 27674), (12, 27620), (19, 27536), (20, 27530), (22, 27518), (30, 27389),

Gene: Troje_41 Start: 28273, Stop: 27737, Start Num: 1

Candidate Starts for Troje_41:

(Start: 1 @28273 has 59 MA's), (3, 28252), (5, 28246), (17, 28021), (24, 27937),

Gene: Typhonomachy_37 Start: 27409, Stop: 26858, Start Num: 1

Candidate Starts for Typhonomachy_37:

(Start: 1 @27409 has 59 MA's), (5, 27382), (10, 27268), (22, 27112), (27, 27013),

Gene: Vine_43 Start: 30028, Stop: 29438, Start Num: 1

Candidate Starts for Vine_43:

(Start: 1 @30028 has 59 MA's), (10, 29890), (14, 29812), (16, 29791), (23, 29722), (29, 29614),

Gene: Wolfwood_39 Start: 27798, Stop: 27268, Start Num: 3

Candidate Starts for Wolfwood_39:

(Start: 1 @27819 has 59 MA's), (3, 27798), (6, 27774), (10, 27678), (11, 27639), (14, 27603), (21, 27531), (26, 27435),

Gene: Yakult_41 Start: 28566, Stop: 28024, Start Num: 1

Candidate Starts for Yakult_41:

(Start: 1 @28566 has 59 MA's), (11, 28389), (13, 28371), (15, 28338), (22, 28275), (27, 28176), (28, 28164), (30, 28146),

Gene: Yarn_36 Start: 27575, Stop: 27027, Start Num: 1

Candidate Starts for Yarn_36:

(Start: 1 @27575 has 59 MA's), (5, 27548), (10, 27434), (12, 27380), (19, 27296), (20, 27290), (22, 27278), (30, 27149),

Gene: Yucky_43 Start: 29968, Stop: 29378, Start Num: 1

Candidate Starts for Yucky_43:

(Start: 1 @29968 has 59 MA's), (10, 29830), (14, 29752), (16, 29731), (29, 29554),

Gene: Yummy_41 Start: 27909, Stop: 27364, Start Num: 1

Candidate Starts for Yummy_41:

(Start: 1 @27909 has 59 MA's), (3, 27888), (5, 27882), (17, 27657), (18, 27636), (24, 27573),

Gene: Zareef_37 Start: 27841, Stop: 27290, Start Num: 1

Candidate Starts for Zareef_37:

(Start: 1 @27841 has 59 MA's), (3, 27820), (6, 27796), (10, 27700), (11, 27661), (14, 27625), (21, 27553), (26, 27457),