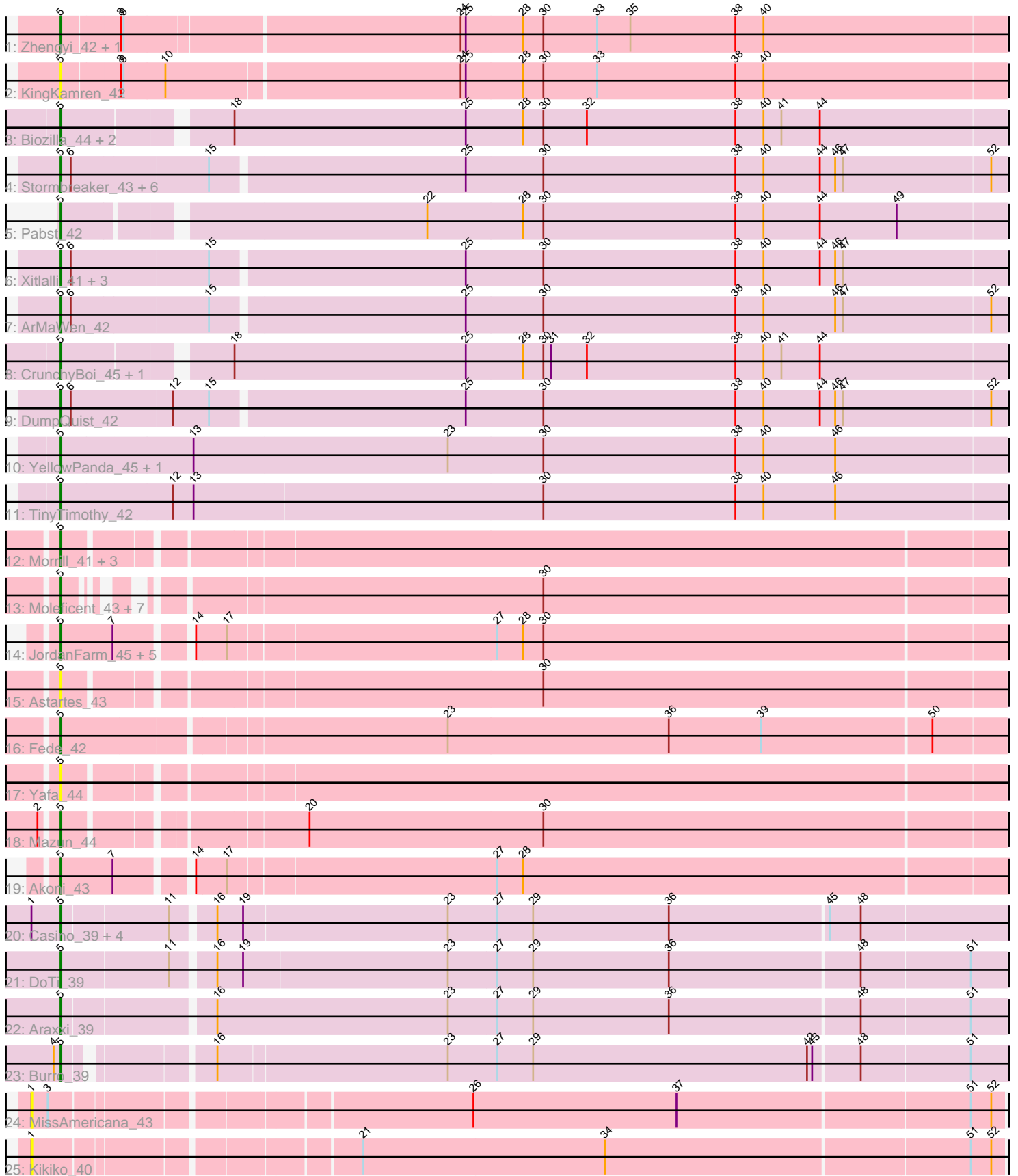


Pham 156395



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 156395 Report

This analysis was run 04/22/24 on database version 561.

Pham number 156395 has 58 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Zhengyi_42, EugeneKrabs_42
- Track 2 : KingKamren_42
- Track 3 : Biozilla_44, HitchHiker_45, Oatly_44
- Track 4 : Stormbreaker_43, Unphazed_43, LilyLou_44, Dashyla_44, Birdfeeder_41, Phogo_43, Alex44_43
- Track 5 : Pabst_42
- Track 6 : Xitlalli_41, Corn21_42, BlueRugrat_42, LesNorah_43
- Track 7 : ArMaWen_42
- Track 8 : CrunchyBoi_45, PineapplePluto_45
- Track 9 : DumpQuist_42
- Track 10 : YellowPanda_45, Wesak_43
- Track 11 : TinyTimothy_42
- Track 12 : Morrill_41, ThirteenKH_43, Atraxi_41, TrippleS_45
- Track 13 : Moleficent_43, PhriedRice_44, Phractured_43, Fullmetal_43, Pharky_43, Phedro_43, RicoCaldo_43, StagePhright_43
- Track 14 : JordanFarm_45, Barroma_45, Truong_43, Ashton_44, AloeVera_44, Waterlily_46
- Track 15 : Astartes_43
- Track 16 : Fede_42
- Track 17 : Yafa_44
- Track 18 : Mazun_44
- Track 19 : Akoni_43
- Track 20 : Casino_39, Gshelby23_37, Hannabella_39, Scruffy_39, Arete_39
- Track 21 : DoTi_39
- Track 22 : Araxxi_39
- Track 23 : Burro_39
- Track 24 : MissAmericana_43
- Track 25 : Kikiko_40

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

The start number called the most often in the published annotations is 5, it was called in 43 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akoni_43, Alex44_43, AloeVera_44, ArMaWen_42, Araxxi_39, Arete_39, Ashton_44, Astartes_43, Atraxi_41, Barroma_45, Biozilla_44, Birdfeeder_41, BlueRugrat_42, Burro_39, Casino_39, Corn21_42, CrunchyBoi_45, Dashyla_44, DoTi_39, DumpQuist_42, EugeneKrabs_42, Fede_42, Fullmetal_43, Gshelby23_37, Hannabella_39, HitchHiker_45, JordanFarm_45, KingKamren_42, LesNorah_43, LilyLou_44, Mazun_44, Moleficient_43, Morrill_41, Oatly_44, Pabst_42, Pharky_43, Phedro_43, Phogo_43, Phracted_43, PhriedRice_44, PineapplePluto_45, RicoCaldo_43, Scruffy_39, StagePhright_43, Stormbreaker_43, ThirteenKH_43, TinyTimothy_42, TrippleS_45, Truong_43, Unphazed_43, Waterlily_46, Wesak_43, Xitlalli_41, Yafa_44, YellowPanda_45, Zhengyi_42,

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

-

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

- Kikiko_40, MissAmericana_43,

Summary by start number:

Start 1:

- Found in 7 of 58 (12.1%) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Kikiko_40 (EM2), MissAmericana_43 (EM2),

Start 5:

- Found in 56 of 58 (96.6%) of genes in pham
- Manual Annotations of this start: 43 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akoni_43 (EK2), Alex44_43 (EK1), AloeVera_44 (EK2), ArMaWen_42 (EK1), Araxxi_39 (EM1), Arete_39 (EM1), Ashton_44 (EK2), Astartes_43 (EK2), Atraxi_41 (EK2), Barroma_45 (EK2), Biozilla_44 (EK1), Birdfeeder_41 (EK1), BlueRugrat_42 (EK1), Burro_39 (EM1), Casino_39 (EM1), Corn21_42 (EK1), CrunchyBoi_45 (EK1), Dashyla_44 (EK1), DoTi_39 (EM1), DumpQuist_42 (EK1), EugeneKrabs_42 (EK), Fede_42 (EK2), Fullmetal_43 (EK2), Gshelby23_37 (EM1), Hannabella_39 (EM1), HitchHiker_45 (EK1), JordanFarm_45 (EK2), KingKamren_42 (EK), LesNorah_43 (EK1), LilyLou_44 (EK1), Mazun_44 (EK2), Moleficient_43 (EK2), Morrill_41 (EK2), Oatly_44 (EK1), Pabst_42 (EK1), Pharky_43 (EK2), Phedro_43 (EK2), Phogo_43 (EK1), Phracted_43 (EK2), PhriedRice_44 (EK2), PineapplePluto_45 (EK1), RicoCaldo_43 (EK2), Scruffy_39 (EM1), StagePhright_43 (EK2), Stormbreaker_43 (EK1), ThirteenKH_43 (EK2), TinyTimothy_42 (EK1), TrippleS_45 (EK2), Truong_43 (EK2), Unphazed_43 (EK1), Waterlily_46 (EK2), Wesak_43 (EK1), Xitlalli_41 (EK1), Yafa_44 (EK2), YellowPanda_45 (EK1), Zhengyi_42 (EK),

Summary by clusters:

There are 5 clusters represented in this pham: EK, EM1, EK2, EK1, EM2,

Info for manual annotations of cluster EK:

- Start number 5 was manually annotated 2 times for cluster EK.

Info for manual annotations of cluster EK1:

•Start number 5 was manually annotated 19 times for cluster EK1.

Info for manual annotations of cluster EK2:

•Start number 5 was manually annotated 16 times for cluster EK2.

Info for manual annotations of cluster EM1:

•Start number 5 was manually annotated 6 times for cluster EM1.

Gene Information:

Gene: Akoni_43 Start: 43447, Stop: 44508, Start Num: 5

Candidate Starts for Akoni_43:

(Start: 5 @43447 has 43 MA's), (7, 43504), (14, 43579), (17, 43612), (27, 43918), (28, 43948),

Gene: Alex44_43 Start: 41662, Stop: 42747, Start Num: 5

Candidate Starts for Alex44_43:

(Start: 5 @41662 has 43 MA's), (6, 41674), (15, 41830), (25, 42118), (30, 42208), (38, 42433), (40, 42466), (44, 42532), (46, 42550), (47, 42559), (52, 42730),

Gene: AloeVera_44 Start: 43660, Stop: 44721, Start Num: 5

Candidate Starts for AloeVera_44:

(Start: 5 @43660 has 43 MA's), (7, 43717), (14, 43792), (17, 43825), (27, 44131), (28, 44161), (30, 44185),

Gene: ArMaWen_42 Start: 41205, Stop: 42290, Start Num: 5

Candidate Starts for ArMaWen_42:

(Start: 5 @41205 has 43 MA's), (6, 41217), (15, 41373), (25, 41661), (30, 41751), (38, 41976), (40, 42009), (46, 42093), (47, 42102), (52, 42273),

Gene: Araxxi_39 Start: 44570, Stop: 45649, Start Num: 5

Candidate Starts for Araxxi_39:

(Start: 5 @44570 has 43 MA's), (16, 44735), (23, 45005), (27, 45062), (29, 45104), (36, 45263), (48, 45482), (51, 45608),

Gene: Arete_39 Start: 44295, Stop: 45374, Start Num: 5

Candidate Starts for Arete_39:

(1, 44262), (Start: 5 @44295 has 43 MA's), (11, 44415), (16, 44460), (19, 44490), (23, 44727), (27, 44784), (29, 44826), (36, 44985), (45, 45168), (48, 45204),

Gene: Ashton_44 Start: 43659, Stop: 44720, Start Num: 5

Candidate Starts for Ashton_44:

(Start: 5 @43659 has 43 MA's), (7, 43716), (14, 43791), (17, 43824), (27, 44130), (28, 44160), (30, 44184),

Gene: Astartes_43 Start: 43209, Stop: 44264, Start Num: 5

Candidate Starts for Astartes_43:

(Start: 5 @43209 has 43 MA's), (30, 43731),

Gene: Atraxi_41 Start: 43001, Stop: 44056, Start Num: 5

Candidate Starts for Atraxi_41:

(Start: 5 @43001 has 43 MA's),

Gene: Barroma_45 Start: 43449, Stop: 44510, Start Num: 5

Candidate Starts for Barroma_45:

(Start: 5 @43449 has 43 MA's), (7, 43506), (14, 43581), (17, 43614), (27, 43920), (28, 43950), (30, 43974),

Gene: Biozilla_44 Start: 41618, Stop: 42691, Start Num: 5

Candidate Starts for Biozilla_44:

(Start: 5 @41618 has 43 MA's), (18, 41792), (25, 42062), (28, 42128), (30, 42152), (32, 42203), (38, 42377), (40, 42410), (41, 42431), (44, 42476),

Gene: Birdfeeder_41 Start: 41418, Stop: 42503, Start Num: 5

Candidate Starts for Birdfeeder_41:

(Start: 5 @41418 has 43 MA's), (6, 41430), (15, 41586), (25, 41874), (30, 41964), (38, 42189), (40, 42222), (44, 42288), (46, 42306), (47, 42315), (52, 42486),

Gene: BlueRugrat_42 Start: 41642, Stop: 42727, Start Num: 5

Candidate Starts for BlueRugrat_42:

(Start: 5 @41642 has 43 MA's), (6, 41654), (15, 41810), (25, 42098), (30, 42188), (38, 42413), (40, 42446), (44, 42512), (46, 42530), (47, 42539),

Gene: Burro_39 Start: 44522, Stop: 45580, Start Num: 5

Candidate Starts for Burro_39:

(4, 44516), (Start: 5 @44522 has 43 MA's), (16, 44669), (23, 44933), (27, 44990), (29, 45032), (42, 45353), (43, 45359), (48, 45410), (51, 45536),

Gene: Casino_39 Start: 44267, Stop: 45346, Start Num: 5

Candidate Starts for Casino_39:

(1, 44234), (Start: 5 @44267 has 43 MA's), (11, 44387), (16, 44432), (19, 44462), (23, 44699), (27, 44756), (29, 44798), (36, 44957), (45, 45140), (48, 45176),

Gene: Corn21_42 Start: 41720, Stop: 42805, Start Num: 5

Candidate Starts for Corn21_42:

(Start: 5 @41720 has 43 MA's), (6, 41732), (15, 41888), (25, 42176), (30, 42266), (38, 42491), (40, 42524), (44, 42590), (46, 42608), (47, 42617),

Gene: CrunchyBoi_45 Start: 41473, Stop: 42546, Start Num: 5

Candidate Starts for CrunchyBoi_45:

(Start: 5 @41473 has 43 MA's), (18, 41647), (25, 41917), (28, 41983), (30, 42007), (31, 42016), (32, 42058), (38, 42232), (40, 42265), (41, 42286), (44, 42331),

Gene: Dashyla_44 Start: 41336, Stop: 42421, Start Num: 5

Candidate Starts for Dashyla_44:

(Start: 5 @41336 has 43 MA's), (6, 41348), (15, 41504), (25, 41792), (30, 41882), (38, 42107), (40, 42140), (44, 42206), (46, 42224), (47, 42233), (52, 42404),

Gene: DoTi_39 Start: 44674, Stop: 45753, Start Num: 5

Candidate Starts for DoTi_39:

(Start: 5 @44674 has 43 MA's), (11, 44797), (16, 44842), (19, 44872), (23, 45109), (27, 45166), (29, 45208), (36, 45367), (48, 45586), (51, 45712),

Gene: DumpQuist_42 Start: 41190, Stop: 42275, Start Num: 5

Candidate Starts for DumpQuist_42:

(Start: 5 @41190 has 43 MA's), (6, 41202), (12, 41316), (15, 41358), (25, 41646), (30, 41736), (38, 41961), (40, 41994), (44, 42060), (46, 42078), (47, 42087), (52, 42258),

Gene: EugeneKrabs_42 Start: 44481, Stop: 45563, Start Num: 5

Candidate Starts for EugeneKrabs_42:

(Start: 5 @44481 has 43 MA's), (8, 44544), (9, 44547), (24, 44928), (25, 44934), (28, 45000), (30, 45024), (33, 45087), (35, 45126), (38, 45249), (40, 45282),

Gene: Fede_42 Start: 42217, Stop: 43293, Start Num: 5

Candidate Starts for Fede_42:

(Start: 5 @42217 has 43 MA's), (23, 42649), (36, 42907), (39, 43015), (50, 43210),

Gene: Fullmetal_43 Start: 43586, Stop: 44599, Start Num: 5

Candidate Starts for Fullmetal_43:

(Start: 5 @43586 has 43 MA's), (30, 44066),

Gene: Gshelby23_37 Start: 44202, Stop: 45281, Start Num: 5

Candidate Starts for Gshelby23_37:

(1, 44169), (Start: 5 @44202 has 43 MA's), (11, 44322), (16, 44367), (19, 44397), (23, 44634), (27, 44691), (29, 44733), (36, 44892), (45, 45075), (48, 45111),

Gene: Hannabella_39 Start: 44243, Stop: 45322, Start Num: 5

Candidate Starts for Hannabella_39:

(1, 44210), (Start: 5 @44243 has 43 MA's), (11, 44363), (16, 44408), (19, 44438), (23, 44675), (27, 44732), (29, 44774), (36, 44933), (45, 45116), (48, 45152),

Gene: HitchHiker_45 Start: 41618, Stop: 42691, Start Num: 5

Candidate Starts for HitchHiker_45:

(Start: 5 @41618 has 43 MA's), (18, 41792), (25, 42062), (28, 42128), (30, 42152), (32, 42203), (38, 42377), (40, 42410), (41, 42431), (44, 42476),

Gene: JordanFarm_45 Start: 43660, Stop: 44721, Start Num: 5

Candidate Starts for JordanFarm_45:

(Start: 5 @43660 has 43 MA's), (7, 43717), (14, 43792), (17, 43825), (27, 44131), (28, 44161), (30, 44185),

Gene: Kikiko_40 Start: 44985, Stop: 46067, Start Num: 1

Candidate Starts for Kikiko_40:

(1, 44985), (21, 45330), (34, 45612), (51, 46029), (52, 46053),

Gene: KingKamren_42 Start: 44435, Stop: 45520, Start Num: 5

Candidate Starts for KingKamren_42:

(Start: 5 @44435 has 43 MA's), (8, 44498), (9, 44501), (10, 44549), (24, 44885), (25, 44891), (28, 44957), (30, 44981), (33, 45044), (38, 45206), (40, 45239),

Gene: LesNorah_43 Start: 42039, Stop: 43124, Start Num: 5

Candidate Starts for LesNorah_43:

(Start: 5 @42039 has 43 MA's), (6, 42051), (15, 42207), (25, 42495), (30, 42585), (38, 42810), (40, 42843), (44, 42909), (46, 42927), (47, 42936),

Gene: LilyLou_44 Start: 41654, Stop: 42739, Start Num: 5
Candidate Starts for LilyLou_44:
(Start: 5 @41654 has 43 MA's), (6, 41666), (15, 41822), (25, 42110), (30, 42200), (38, 42425), (40, 42458), (44, 42524), (46, 42542), (47, 42551), (52, 42722),

Gene: Mazun_44 Start: 43947, Stop: 45002, Start Num: 5
Candidate Starts for Mazun_44:
(2, 43929), (Start: 5 @43947 has 43 MA's), (20, 44196), (30, 44469),

Gene: MissAmericana_43 Start: 44924, Stop: 46006, Start Num: 1
Candidate Starts for MissAmericana_43:
(1, 44924), (3, 44942), (26, 45398), (37, 45635), (51, 45968), (52, 45992),

Gene: Moleficient_43 Start: 43593, Stop: 44606, Start Num: 5
Candidate Starts for Moleficient_43:
(Start: 5 @43593 has 43 MA's), (30, 44073),

Gene: Morrill_41 Start: 42981, Stop: 44036, Start Num: 5
Candidate Starts for Morrill_41:
(Start: 5 @42981 has 43 MA's),

Gene: Oatly_44 Start: 41178, Stop: 42251, Start Num: 5
Candidate Starts for Oatly_44:
(Start: 5 @41178 has 43 MA's), (18, 41352), (25, 41622), (28, 41688), (30, 41712), (32, 41763), (38, 41937), (40, 41970), (41, 41991), (44, 42036),

Gene: Pabst_42 Start: 41248, Stop: 42318, Start Num: 5
Candidate Starts for Pabst_42:
(Start: 5 @41248 has 43 MA's), (22, 41644), (28, 41755), (30, 41779), (38, 42004), (40, 42037), (44, 42103), (49, 42193),

Gene: Pharky_43 Start: 43589, Stop: 44602, Start Num: 5
Candidate Starts for Pharky_43:
(Start: 5 @43589 has 43 MA's), (30, 44069),

Gene: Phedro_43 Start: 43589, Stop: 44602, Start Num: 5
Candidate Starts for Phedro_43:
(Start: 5 @43589 has 43 MA's), (30, 44069),

Gene: Phogo_43 Start: 41482, Stop: 42567, Start Num: 5
Candidate Starts for Phogo_43:
(Start: 5 @41482 has 43 MA's), (6, 41494), (15, 41650), (25, 41938), (30, 42028), (38, 42253), (40, 42286), (44, 42352), (46, 42370), (47, 42379), (52, 42550),

Gene: Phracted_43 Start: 43589, Stop: 44602, Start Num: 5
Candidate Starts for Phracted_43:
(Start: 5 @43589 has 43 MA's), (30, 44069),

Gene: PhriedRice_44 Start: 43693, Stop: 44706, Start Num: 5
Candidate Starts for PhriedRice_44:
(Start: 5 @43693 has 43 MA's), (30, 44173),

Gene: PineapplePluto_45 Start: 41540, Stop: 42613, Start Num: 5

Candidate Starts for PineapplePluto_45:

(Start: 5 @41540 has 43 MA's), (18, 41714), (25, 41984), (28, 42050), (30, 42074), (31, 42083), (32, 42125), (38, 42299), (40, 42332), (41, 42353), (44, 42398),

Gene: RicoCaldo_43 Start: 43671, Stop: 44684, Start Num: 5

Candidate Starts for RicoCaldo_43:

(Start: 5 @43671 has 43 MA's), (30, 44151),

Gene: Scruffy_39 Start: 44531, Stop: 45610, Start Num: 5

Candidate Starts for Scruffy_39:

(1, 44498), (Start: 5 @44531 has 43 MA's), (11, 44651), (16, 44696), (19, 44726), (23, 44963), (27, 45020), (29, 45062), (36, 45221), (45, 45404), (48, 45440),

Gene: StagePhright_43 Start: 43589, Stop: 44602, Start Num: 5

Candidate Starts for StagePhright_43:

(Start: 5 @43589 has 43 MA's), (30, 44069),

Gene: Stormbreaker_43 Start: 41570, Stop: 42655, Start Num: 5

Candidate Starts for Stormbreaker_43:

(Start: 5 @41570 has 43 MA's), (6, 41582), (15, 41738), (25, 42026), (30, 42116), (38, 42341), (40, 42374), (44, 42440), (46, 42458), (47, 42467), (52, 42638),

Gene: ThirteenKH_43 Start: 42991, Stop: 44046, Start Num: 5

Candidate Starts for ThirteenKH_43:

(Start: 5 @42991 has 43 MA's),

Gene: TinyTimothy_42 Start: 43388, Stop: 44482, Start Num: 5

Candidate Starts for TinyTimothy_42:

(Start: 5 @43388 has 43 MA's), (12, 43514), (13, 43538), (30, 43943), (38, 44168), (40, 44201), (46, 44285),

Gene: TrippleS_45 Start: 43140, Stop: 44195, Start Num: 5

Candidate Starts for TrippleS_45:

(Start: 5 @43140 has 43 MA's),

Gene: Truong_43 Start: 43449, Stop: 44510, Start Num: 5

Candidate Starts for Truong_43:

(Start: 5 @43449 has 43 MA's), (7, 43506), (14, 43581), (17, 43614), (27, 43920), (28, 43950), (30, 43974),

Gene: Unphazed_43 Start: 41443, Stop: 42528, Start Num: 5

Candidate Starts for Unphazed_43:

(Start: 5 @41443 has 43 MA's), (6, 41455), (15, 41611), (25, 41899), (30, 41989), (38, 42214), (40, 42247), (44, 42313), (46, 42331), (47, 42340), (52, 42511),

Gene: Waterlily_46 Start: 43703, Stop: 44761, Start Num: 5

Candidate Starts for Waterlily_46:

(Start: 5 @43703 has 43 MA's), (7, 43760), (14, 43835), (17, 43868), (27, 44171), (28, 44201), (30, 44225),

Gene: Wesak_43 Start: 43230, Stop: 44327, Start Num: 5

Candidate Starts for Wesak_43:

(Start: 5 @43230 has 43 MA's), (13, 43380), (23, 43677), (30, 43788), (38, 44013), (40, 44046), (46, 44130),

Gene: Xitlalli_41 Start: 41447, Stop: 42532, Start Num: 5

Candidate Starts for Xitlalli_41:

(Start: 5 @41447 has 43 MA's), (6, 41459), (15, 41615), (25, 41903), (30, 41993), (38, 42218), (40, 42251), (44, 42317), (46, 42335), (47, 42344),

Gene: Yafa_44 Start: 42895, Stop: 43950, Start Num: 5

Candidate Starts for Yafa_44:

(Start: 5 @42895 has 43 MA's),

Gene: YellowPanda_45 Start: 43111, Stop: 44208, Start Num: 5

Candidate Starts for YellowPanda_45:

(Start: 5 @43111 has 43 MA's), (13, 43261), (23, 43558), (30, 43669), (38, 43894), (40, 43927), (46, 44011),

Gene: Zhengyi_42 Start: 44530, Stop: 45612, Start Num: 5

Candidate Starts for Zhengyi_42:

(Start: 5 @44530 has 43 MA's), (8, 44593), (9, 44596), (24, 44977), (25, 44983), (28, 45049), (30, 45073), (33, 45136), (35, 45175), (38, 45298), (40, 45331),