

Pham 153236



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 153236 Report

This analysis was run 04/28/24 on database version 559.

Pham number 153236 has 55 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Maco6_50
- Track 2 : 8UZL_52, Muddy_52, FF47_50
- Track 3 : Quasar_55, Agatha_55, Nina_55, Cozz_53, MunkgeeRoachy_56, Axym_54, GoldHunter_56, Burnsey_55, SweatNTears_57
- Track 4 : HippoPololi_52
- Track 5 : Fribs8_51
- Track 6 : AikoCarson_56, Amok_56
- Track 7 : Nibbles_50
- Track 8 : MAnor_61, Mayweather_63, CherryonLim_60
- Track 9 : Survivors_51, MaVan_51, Azira_51, Zareef_53
- Track 10 : Biskit_57, SketchMex_55, Horseradish_57, Buttrmlkdreams_57, Yummy_57, Troje_57, MScarn_59
- Track 11 : Elinal_64, KayGee_61
- Track 12 : Yarn_52, SteamedHams_56, Tolls_56, AndPeggy_52, BillDoor_55
- Track 13 : SummitAcademy_59, BigChungus_59, Vine_62, PotPie_58, Feastonyet_59
- Track 14 : Dre3_52, Gibbous_52, Cleo_49
- Track 15 : PsychoKiller_54, Sopespian_52, Elliott_55
- Track 16 : SheckWes_63
- Track 17 : Typhonomachy_55
- Track 18 : Lauer_54
- Track 19 : Pons_61
- Track 20 : Emalyn_54

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

The start number called the most often in the published annotations is 21, it was called in 21 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_55, AikoCarson_56, Amok_56, AndPeggy_52, Axym_54, BillDoor_55, Biskit_57, Burnsey_55, Buttrmlkdreams_57, Cozz_53, Elliott_55, GoldHunter_56, Horseradish_57, MScarn_59, MunkgeeRoachy_56, Nina_55, PsychoKiller_54, Quasar_55, SketchMex_55, Sopespian_52, SteamedHams_56, SweatNTears_57,

Tolls_56, Troje_57, Typhonomachy_55, Yarn_52, Yummy_57,

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

- 8UZL_52, Emalyn_54, FF47_50, Maco6_50, Muddy_52,

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

- Azira_51, BigChungus_59, CherryonLim_60, Cleo_49, Dre3_52, Elinal_64, Feastonyeet_59, Fribs8_51, Gibbous_52, HippoPololi_52, KayGee_61, Lauer_54, MAnor_61, MaVan_51, Mayweather_63, Nibbles_50, Pons_61, PotPie_58, SheckWes_63, SummitAcademy_59, Survivors_51, Vine_62, Zareef_53,

Summary by start number:

Start 16:

- Found in 23 of 55 (41.8%) of genes in pham
- Manual Annotations of this start: 18 of 42
- Called 95.7% of time when present
- Phage (with cluster) where this start called: Azira_51 (CT), BigChungus_59 (CT), CherryonLim_60 (CT), Cleo_49 (CT), Dre3_52 (CT), Elinal_64 (CT), Feastonyeet_59 (CT), Fribs8_51 (CT), Gibbous_52 (CT), KayGee_61 (CT), Lauer_54 (CT), MAnor_61 (CT), MaVan_51 (CT), Mayweather_63 (CT), Nibbles_50 (CT), Pons_61 (CT), PotPie_58 (CT), SheckWes_63 (CT), SummitAcademy_59 (CT), Survivors_51 (CT), Vine_62 (CT), Zareef_53 (CT),

Start 18:

- Found in 3 of 55 (5.5%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Emalyn_54 (CT),

Start 20:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 8UZL_52 (AB), FF47_50 (AB), Maco6_50 (AB), Muddy_52 (AB),

Start 21:

- Found in 32 of 55 (58.2%) of genes in pham
- Manual Annotations of this start: 21 of 42
- Called 84.4% of time when present
- Phage (with cluster) where this start called: Agatha_55 (CT), AikoCarson_56 (CT), Amok_56 (CT), AndPeggy_52 (CT), Axym_54 (CT), BillDoor_55 (CT), Biskit_57 (CT), Burnsey_55 (CT), Buttrmlkdreams_57 (CT), Cozz_53 (CT), Eliott_55 (CT), GoldHunter_56 (CT), Horseradish_57 (CT), MScarn_59 (CT), MunkgeeRoachy_56 (CT), Nina_55 (CT), PsychoKiller_54 (CT), Quasar_55 (CT), SketchMex_55 (CT), Sopespian_52 (CT), SteamedHams_56 (CT), SweatNTears_57 (CT), Tolls_56 (CT), Troje_57 (CT), Typhonomachy_55 (CT), Yarn_52 (CT), Yummy_57 (CT),

Start 24:

- Found in 18 of 55 (32.7%) of genes in pham
- No Manual Annotations of this start.
- Called 5.6% of time when present

- Phage (with cluster) where this start called: HippoPololi_52 (CT),

Summary by clusters:

There are 2 clusters represented in this pham: AB, CT,

Info for manual annotations of cluster AB:

- Start number 20 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster CT:

- Start number 16 was manually annotated 18 times for cluster CT.
- Start number 18 was manually annotated 1 time for cluster CT.
- Start number 21 was manually annotated 21 times for cluster CT.

Gene Information:

Gene: 8UZL_52 Start: 39521, Stop: 39339, Start Num: 20

Candidate Starts for 8UZL_52:

(Start: 20 @39521 has 2 MA's), (Start: 21 @39512 has 21 MA's), (22, 39509), (26, 39470), (33, 39410), (36, 39365),

Gene: Agatha_55 Start: 39281, Stop: 39108, Start Num: 21

Candidate Starts for Agatha_55:

(2, 39500), (3, 39494), (7, 39458), (8, 39452), (11, 39422), (12, 39389), (13, 39383), (Start: 21 @39281 has 21 MA's), (25, 39248), (27, 39239), (29, 39224), (34, 39176), (36, 39137),

Gene: AikoCarson_56 Start: 39495, Stop: 39322, Start Num: 21

Candidate Starts for AikoCarson_56:

(8, 39639), (10, 39615), (11, 39609), (12, 39576), (Start: 18 @39501 has 1 MA's), (Start: 21 @39495 has 21 MA's), (25, 39462), (29, 39438), (32, 39402), (34, 39390), (36, 39351),

Gene: Amok_56 Start: 39423, Stop: 39250, Start Num: 21

Candidate Starts for Amok_56:

(8, 39567), (10, 39543), (11, 39537), (12, 39504), (Start: 18 @39429 has 1 MA's), (Start: 21 @39423 has 21 MA's), (25, 39390), (29, 39366), (32, 39330), (34, 39318), (36, 39279),

Gene: AndPeggy_52 Start: 38688, Stop: 38515, Start Num: 21

Candidate Starts for AndPeggy_52:

(8, 38868), (10, 38844), (11, 38838), (14, 38787), (17, 38727), (Start: 21 @38688 has 21 MA's), (25, 38655), (33, 38589), (34, 38583), (36, 38544),

Gene: Axym_54 Start: 39178, Stop: 39005, Start Num: 21

Candidate Starts for Axym_54:

(2, 39397), (3, 39391), (7, 39355), (8, 39349), (11, 39319), (12, 39286), (13, 39280), (Start: 21 @39178 has 21 MA's), (25, 39145), (27, 39136), (29, 39121), (34, 39073), (36, 39034),

Gene: Azira_51 Start: 38488, Stop: 38276, Start Num: 16

Candidate Starts for Azira_51:

(9, 38626), (15, 38539), (Start: 16 @38488 has 18 MA's), (19, 38458), (24, 38428), (34, 38341),

Gene: BigChungus_59 Start: 41075, Stop: 40881, Start Num: 16

Candidate Starts for BigChungus_59:

(1, 41414), (6, 41222), (9, 41213), (Start: 16 @41075 has 18 MA's), (24, 41036), (28, 41009), (31, 40964), (32, 40961), (34, 40949), (36, 40910), (37, 40889),

Gene: BillDoor_55 Start: 38364, Stop: 38191, Start Num: 21

Candidate Starts for BillDoor_55:

(8, 38544), (10, 38520), (11, 38514), (14, 38463), (17, 38403), (Start: 21 @38364 has 21 MA's), (25, 38331), (33, 38265), (34, 38259), (36, 38220),

Gene: Biskit_57 Start: 39090, Stop: 38917, Start Num: 21

Candidate Starts for Biskit_57:

(2, 39282), (4, 39249), (8, 39234), (12, 39171), (Start: 21 @39090 has 21 MA's), (25, 39057), (33, 38991), (35, 38976), (36, 38946),

Gene: Burnsey_55 Start: 39272, Stop: 39099, Start Num: 21

Candidate Starts for Burnsey_55:

(2, 39491), (3, 39485), (7, 39449), (8, 39443), (11, 39413), (12, 39380), (13, 39374), (Start: 21 @39272 has 21 MA's), (25, 39239), (27, 39230), (29, 39215), (34, 39167), (36, 39128),

Gene: Buttrmlkdreams_57 Start: 39537, Stop: 39364, Start Num: 21

Candidate Starts for Buttrmlkdreams_57:

(2, 39729), (4, 39696), (8, 39681), (12, 39618), (Start: 21 @39537 has 21 MA's), (25, 39504), (33, 39438), (35, 39423), (36, 39393),

Gene: CherryonLim_60 Start: 42554, Stop: 42360, Start Num: 16

Candidate Starts for CherryonLim_60:

(5, 42704), (6, 42701), (9, 42692), (Start: 16 @42554 has 18 MA's), (31, 42443), (34, 42428), (37, 42368),

Gene: Cleo_49 Start: 38249, Stop: 38037, Start Num: 16

Candidate Starts for Cleo_49:

(6, 38396), (9, 38387), (15, 38300), (Start: 16 @38249 has 18 MA's), (19, 38219), (Start: 20 @38216 has 2 MA's), (24, 38189), (26, 38168), (28, 38162), (34, 38102),

Gene: Cozz_53 Start: 38869, Stop: 38696, Start Num: 21

Candidate Starts for Cozz_53:

(2, 39088), (3, 39082), (7, 39046), (8, 39040), (11, 39010), (12, 38977), (13, 38971), (Start: 21 @38869 has 21 MA's), (25, 38836), (27, 38827), (29, 38812), (34, 38764), (36, 38725),

Gene: Dre3_52 Start: 39093, Stop: 38881, Start Num: 16

Candidate Starts for Dre3_52:

(6, 39240), (9, 39231), (15, 39144), (Start: 16 @39093 has 18 MA's), (19, 39063), (Start: 20 @39060 has 2 MA's), (24, 39033), (26, 39012), (28, 39006), (34, 38946),

Gene: Elinal_64 Start: 41883, Stop: 41689, Start Num: 16

Candidate Starts for Elinal_64:

(6, 42030), (9, 42021), (Start: 16 @41883 has 18 MA's), (24, 41844), (31, 41772), (32, 41769), (34, 41757), (37, 41697),

Gene: Elliott_55 Start: 39165, Stop: 38992, Start Num: 21

Candidate Starts for Elliott_55:

(2, 39384), (7, 39342), (8, 39336), (11, 39306), (12, 39273), (13, 39267), (Start: 21 @39165 has 21 MA's), (25, 39132), (27, 39123), (29, 39108), (34, 39060), (36, 39021),

Gene: Emalyn_54 Start: 38221, Stop: 38042, Start Num: 18

Candidate Starts for Emalyn_54:

(8, 38359), (10, 38335), (11, 38329), (12, 38296), (Start: 18 @38221 has 1 MA's), (Start: 21 @38215 has 21 MA's), (25, 38182), (29, 38158), (32, 38122), (34, 38110), (36, 38071),

Gene: FF47_50 Start: 39432, Stop: 39250, Start Num: 20

Candidate Starts for FF47_50:

(Start: 20 @39432 has 2 MA's), (Start: 21 @39423 has 21 MA's), (22, 39420), (26, 39381), (33, 39321), (36, 39276),

Gene: Feastonyeet_59 Start: 41075, Stop: 40881, Start Num: 16

Candidate Starts for Feastonyeet_59:

(1, 41414), (6, 41222), (9, 41213), (Start: 16 @41075 has 18 MA's), (24, 41036), (28, 41009), (31, 40964), (32, 40961), (34, 40949), (36, 40910), (37, 40889),

Gene: Fribs8_51 Start: 39165, Stop: 38953, Start Num: 16

Candidate Starts for Fribs8_51:

(6, 39312), (9, 39303), (15, 39216), (Start: 16 @39165 has 18 MA's), (19, 39135), (24, 39105), (34, 39018), (35, 39009),

Gene: Gibbous_52 Start: 39093, Stop: 38881, Start Num: 16

Candidate Starts for Gibbous_52:

(6, 39240), (9, 39231), (15, 39144), (Start: 16 @39093 has 18 MA's), (19, 39063), (Start: 20 @39060 has 2 MA's), (24, 39033), (26, 39012), (28, 39006), (34, 38946),

Gene: GoldHunter_56 Start: 39282, Stop: 39109, Start Num: 21

Candidate Starts for GoldHunter_56:

(2, 39501), (3, 39495), (7, 39459), (8, 39453), (11, 39423), (12, 39390), (13, 39384), (Start: 21 @39282 has 21 MA's), (25, 39249), (27, 39240), (29, 39225), (34, 39177), (36, 39138),

Gene: HippoPololi_52 Start: 38342, Stop: 38190, Start Num: 24

Candidate Starts for HippoPololi_52:

(Start: 16 @38402 has 18 MA's), (19, 38372), (Start: 20 @38369 has 2 MA's), (24, 38342), (26, 38321), (28, 38315), (30, 38297), (34, 38255),

Gene: Horseradish_57 Start: 39023, Stop: 38850, Start Num: 21

Candidate Starts for Horseradish_57:

(2, 39215), (4, 39182), (8, 39167), (12, 39104), (Start: 21 @39023 has 21 MA's), (25, 38990), (33, 38924), (35, 38909), (36, 38879),

Gene: KayGee_61 Start: 41883, Stop: 41689, Start Num: 16

Candidate Starts for KayGee_61:

(6, 42030), (9, 42021), (Start: 16 @41883 has 18 MA's), (24, 41844), (31, 41772), (32, 41769), (34, 41757), (37, 41697),

Gene: Lauer_54 Start: 42060, Stop: 41866, Start Num: 16

Candidate Starts for Lauer_54:

(6, 42207), (9, 42198), (15, 42111), (Start: 16 @42060 has 18 MA's), (31, 41949), (34, 41934),

Gene: MAnor_61 Start: 42014, Stop: 41820, Start Num: 16

Candidate Starts for MAnor_61:

(5, 42164), (6, 42161), (9, 42152), (Start: 16 @42014 has 18 MA's), (31, 41903), (34, 41888), (37, 41828),

Gene: MScarn_59 Start: 39205, Stop: 39032, Start Num: 21

Candidate Starts for MScarn_59:

(2, 39397), (4, 39364), (8, 39349), (12, 39286), (Start: 21 @39205 has 21 MA's), (25, 39172), (33, 39106), (35, 39091), (36, 39061),

Gene: MaVan_51 Start: 38517, Stop: 38305, Start Num: 16

Candidate Starts for MaVan_51:

(9, 38655), (15, 38568), (Start: 16 @38517 has 18 MA's), (19, 38487), (24, 38457), (34, 38370),

Gene: Maco6_50 Start: 38772, Stop: 38590, Start Num: 20

Candidate Starts for Maco6_50:

(Start: 20 @38772 has 2 MA's), (Start: 21 @38763 has 21 MA's), (22, 38760), (23, 38745), (26, 38721), (33, 38661), (36, 38616),

Gene: Mayweather_63 Start: 42277, Stop: 42083, Start Num: 16

Candidate Starts for Mayweather_63:

(5, 42427), (6, 42424), (9, 42415), (Start: 16 @42277 has 18 MA's), (31, 42166), (34, 42151), (37, 42091),

Gene: Muddy_52 Start: 40004, Stop: 39822, Start Num: 20

Candidate Starts for Muddy_52:

(Start: 20 @40004 has 2 MA's), (Start: 21 @39995 has 21 MA's), (22, 39992), (26, 39953), (33, 39893), (36, 39848),

Gene: MunkgeeRoachy_56 Start: 38628, Stop: 38455, Start Num: 21

Candidate Starts for MunkgeeRoachy_56:

(2, 38847), (3, 38841), (7, 38805), (8, 38799), (11, 38769), (12, 38736), (13, 38730), (Start: 21 @38628 has 21 MA's), (25, 38595), (27, 38586), (29, 38571), (34, 38523), (36, 38484),

Gene: Nibbles_50 Start: 38210, Stop: 37998, Start Num: 16

Candidate Starts for Nibbles_50:

(9, 38348), (15, 38261), (Start: 16 @38210 has 18 MA's), (19, 38180), (24, 38150), (34, 38063), (35, 38054),

Gene: Nina_55 Start: 39768, Stop: 39595, Start Num: 21

Candidate Starts for Nina_55:

(2, 39987), (3, 39981), (7, 39945), (8, 39939), (11, 39909), (12, 39876), (13, 39870), (Start: 21 @39768 has 21 MA's), (25, 39735), (27, 39726), (29, 39711), (34, 39663), (36, 39624),

Gene: Pons_61 Start: 41619, Stop: 41425, Start Num: 16

Candidate Starts for Pons_61:

(1, 41958), (6, 41766), (9, 41757), (15, 41670), (Start: 16 @41619 has 18 MA's), (24, 41580), (28, 41553), (31, 41508), (32, 41505), (34, 41493), (37, 41433),

Gene: PotPie_58 Start: 42110, Stop: 41916, Start Num: 16

Candidate Starts for PotPie_58:

(1, 42449), (6, 42257), (9, 42248), (Start: 16 @42110 has 18 MA's), (24, 42071), (28, 42044), (31, 41999), (32, 41996), (34, 41984), (36, 41945), (37, 41924),

Gene: PsychoKiller_54 Start: 39166, Stop: 38993, Start Num: 21

Candidate Starts for PsychoKiller_54:

(2, 39385), (7, 39343), (8, 39337), (11, 39307), (12, 39274), (13, 39268), (Start: 21 @39166 has 21 MA's), (25, 39133), (27, 39124), (29, 39109), (34, 39061), (36, 39022),

Gene: Quasar_55 Start: 39870, Stop: 39697, Start Num: 21

Candidate Starts for Quasar_55:

(2, 40089), (3, 40083), (7, 40047), (8, 40041), (11, 40011), (12, 39978), (13, 39972), (Start: 21 @39870 has 21 MA's), (25, 39837), (27, 39828), (29, 39813), (34, 39765), (36, 39726),

Gene: SheckWes_63 Start: 41150, Stop: 40956, Start Num: 16

Candidate Starts for SheckWes_63:

(6, 41297), (9, 41288), (15, 41201), (Start: 16 @41150 has 18 MA's), (31, 41039), (34, 41024), (35, 41015), (37, 40964),

Gene: SketchMex_55 Start: 39090, Stop: 38917, Start Num: 21

Candidate Starts for SketchMex_55:

(2, 39282), (4, 39249), (8, 39234), (12, 39171), (Start: 21 @39090 has 21 MA's), (25, 39057), (33, 38991), (35, 38976), (36, 38946),

Gene: Sopespian_52 Start: 39167, Stop: 38994, Start Num: 21

Candidate Starts for Sopespian_52:

(2, 39386), (7, 39344), (8, 39338), (11, 39308), (12, 39275), (13, 39269), (Start: 21 @39167 has 21 MA's), (25, 39134), (27, 39125), (29, 39110), (34, 39062), (36, 39023),

Gene: SteamedHams_56 Start: 38665, Stop: 38492, Start Num: 21

Candidate Starts for SteamedHams_56:

(8, 38845), (10, 38821), (11, 38815), (14, 38764), (17, 38704), (Start: 21 @38665 has 21 MA's), (25, 38632), (33, 38566), (34, 38560), (36, 38521),

Gene: SummitAcademy_59 Start: 41253, Stop: 41059, Start Num: 16

Candidate Starts for SummitAcademy_59:

(1, 41592), (6, 41400), (9, 41391), (Start: 16 @41253 has 18 MA's), (24, 41214), (28, 41187), (31, 41142), (32, 41139), (34, 41127), (36, 41088), (37, 41067),

Gene: Survivors_51 Start: 38410, Stop: 38198, Start Num: 16

Candidate Starts for Survivors_51:

(9, 38548), (15, 38461), (Start: 16 @38410 has 18 MA's), (19, 38380), (24, 38350), (34, 38263),

Gene: SweatNTears_57 Start: 39409, Stop: 39236, Start Num: 21

Candidate Starts for SweatNTears_57:

(2, 39628), (3, 39622), (7, 39586), (8, 39580), (11, 39550), (12, 39517), (13, 39511), (Start: 21 @39409 has 21 MA's), (25, 39376), (27, 39367), (29, 39352), (34, 39304), (36, 39265),

Gene: Tolls_56 Start: 38936, Stop: 38763, Start Num: 21

Candidate Starts for Tolls_56:

(8, 39116), (10, 39092), (11, 39086), (14, 39035), (17, 38975), (Start: 21 @38936 has 21 MA's), (25, 38903), (33, 38837), (34, 38831), (36, 38792),

Gene: Troje_57 Start: 39428, Stop: 39255, Start Num: 21

Candidate Starts for Troje_57:

(2, 39620), (4, 39587), (8, 39572), (12, 39509), (Start: 21 @39428 has 21 MA's), (25, 39395), (33, 39329), (35, 39314), (36, 39284),

Gene: Typhonomachy_55 Start: 38991, Stop: 38818, Start Num: 21

Candidate Starts for Typhonomachy_55:

(2, 39210), (3, 39204), (7, 39168), (8, 39162), (11, 39132), (12, 39099), (13, 39093), (Start: 21 @38991 has 21 MA's), (25, 38958), (27, 38949), (34, 38886), (36, 38847),

Gene: Vine_62 Start: 41876, Stop: 41682, Start Num: 16

Candidate Starts for Vine_62:

(1, 42215), (6, 42023), (9, 42014), (Start: 16 @41876 has 18 MA's), (24, 41837), (28, 41810), (31, 41765), (32, 41762), (34, 41750), (36, 41711), (37, 41690),

Gene: Yarn_52 Start: 38693, Stop: 38520, Start Num: 21

Candidate Starts for Yarn_52:

(8, 38873), (10, 38849), (11, 38843), (14, 38792), (17, 38732), (Start: 21 @38693 has 21 MA's), (25, 38660), (33, 38594), (34, 38588), (36, 38549),

Gene: Yummy_57 Start: 39137, Stop: 38964, Start Num: 21

Candidate Starts for Yummy_57:

(2, 39329), (4, 39296), (8, 39281), (12, 39218), (Start: 21 @39137 has 21 MA's), (25, 39104), (33, 39038), (35, 39023), (36, 38993),

Gene: Zareef_53 Start: 38507, Stop: 38295, Start Num: 16

Candidate Starts for Zareef_53:

(9, 38645), (15, 38558), (Start: 16 @38507 has 18 MA's), (19, 38477), (24, 38447), (34, 38360),