

Pham 85638



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 85638 Report

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

Pham number 85638 has 65 members, 13 are drafts.

Phages represented in each track:

- Track 1 : GMA7\_68, Austin\_78, HayZem\_80, Amore2\_79, GTE7\_67
- Track 2 : Poland\_85, Msay19\_84
- Track 3 : Boneham\_83, Eggsie\_78, Jellybones\_81, Butterball\_82, Adgers\_83, FelixAlejandro\_84, BirksAndSocks\_84
- Track 4 : CathyBurgh\_79, Ekhein\_80, Squibbles\_79, Monty\_79, GourdThymes\_80, Barbochs\_79, Flakey\_79, Breezic\_80, Hotorobo\_80, Gorko\_79, Lizzo\_80, John316\_83, RemRem\_81
- Track 5 : PierreThree\_79, Chelms\_80, Dakiti\_81, Linetti\_80
- Track 6 : Exiguo\_79, Sam12\_79
- Track 7 : Beaver\_83
- Track 8 : Sombrero\_81, Diabla\_86
- Track 9 : RoyalG\_80, SteveFrench\_79
- Track 10 : PokyPuppy\_77
- Track 11 : BenoitCattle\_81
- Track 12 : Damp\_75, GalacticEye\_78, Neoevie\_77, Teal\_77, Lidong\_78, Berries\_78, MrWormie\_78, Harambe\_77, Guillaume\_77, Anamika\_77, Jams\_78, Luker\_79, Newt\_79, Hello\_77, Kaseim\_77, Hail2Pitt\_76, Nimi13\_77, Woes\_77, Charianelly\_77, Jormungandr\_77, Minos\_79, Bianmat\_78, Shelley\_78, Sticker17\_78
- Track 13 : Lahirium\_77

### ***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 29 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers\_83, Barbochs\_79, Beaver\_83, BenoitCattle\_81, BirksAndSocks\_84, Boneham\_83, Breezic\_80, Butterball\_82, CathyBurgh\_79, Chelms\_80, Dakiti\_81, Diabla\_86, Eggsie\_78, Ekhein\_80, Exiguo\_79, FelixAlejandro\_84, Flakey\_79, Gorko\_79, GourdThymes\_80, Hotorobo\_80, Jellybones\_81, John316\_83, Linetti\_80, Lizzo\_80, Monty\_79, Msay19\_84, PierreThree\_79, PokyPuppy\_77, Poland\_85, RemRem\_81, RoyalG\_80, Sam12\_79, Sombrero\_81, Squibbles\_79, SteveFrench\_79,

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

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

- Amore2\_79, Anamika\_77, Austin\_78, Berries\_78, Bianmat\_78, Charianelly\_77, Damp\_75, GMA7\_68, GTE7\_67, GalacticEye\_78, Guillaume\_77, Hail2Pitt\_76, Harambe\_77, HayZem\_80, Hello\_77, Jams\_78, Jormungandr\_77, Kaseim\_77, Lahirium\_77, Lidong\_78, Luker\_79, Minos\_79, MrWormie\_78, Neoevie\_77, Newt\_79, Nimi13\_77, Shelley\_78, Sticker17\_78, Teal\_77, Woes\_77,

### Summary by start number:

Start 4:

- Found in 25 of 65 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 21 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anamika\_77 (CS3), Berries\_78 (CS3), Bianmat\_78 (CS3), Charianelly\_77 (CS3), Damp\_75 (CS3), GalacticEye\_78 (CS3), Guillaume\_77 (CS3), Hail2Pitt\_76 (CS3), Harambe\_77 (CS3), Hello\_77 (CS3), Jams\_78 (CS3), Jormungandr\_77 (CS3), Kaseim\_77 (CS3), Lahirium\_77 (CS3), Lidong\_78 (CS3), Luker\_79 (CS3), Minos\_79 (CS3), MrWormie\_78 (CS3), Neoevie\_77 (CS3), Newt\_79 (CS3), Nimi13\_77 (CS3), Shelley\_78 (CS3), Sticker17\_78 (CS3), Teal\_77 (CS3), Woes\_77 (CS3),

Start 5:

- Found in 35 of 65 ( 53.8% ) of genes in pham
- Manual Annotations of this start: 29 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adgers\_83 (CS2), Barbochs\_79 (CS2), Beaver\_83 (CS2), BenoitCattle\_81 (CS2), BirksAndSocks\_84 (CS2), Boneham\_83 (CS2), Breezic\_80 (CS2), Butterball\_82 (CS2), CathyBurgh\_79 (CS2), Chelms\_80 (CS2), Dakiti\_81 (CS2), Diabla\_86 (CS2), Eggsie\_78 (CS2), Ekhein\_80 (CS2), Exiguo\_79 (CS2), FelixAlejandro\_84 (CS2), Flakey\_79 (CS2), Gorko\_79 (CS2), GourdThymes\_80 (CS2), Hotorobo\_80 (CS2), Jellybones\_81 (CS2), John316\_83 (CS2), Linetti\_80 (CS2), Lizzo\_80 (CS2), Monty\_79 (CS2), Msay19\_84 (CS2), PierreThree\_79 (CS2), PokyPuppy\_77 (CS2), Poland\_85 (CS2), RemRem\_81 (CS2), RoyalG\_80 (CS2), Sam12\_79 (CS2), Sombrero\_81 (CS2), Squibbles\_79 (CS2), SteveFrench\_79 (CS2),

Start 6:

- Found in 5 of 65 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 2 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amore2\_79 (CS1), Austin\_78 (CS1), GMA7\_68 (CS1), GTE7\_67 (CS1), HayZem\_80 (CS1),

### Summary by clusters:

There are 3 clusters represented in this pham: CS1, CS3, CS2,

Info for manual annotations of cluster CS1:

- Start number 6 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 5 was manually annotated 29 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 4 was manually annotated 21 times for cluster CS3.

### **Gene Information:**

Gene: Adgers\_83 Start: 62085, Stop: 61864, Start Num: 5

Candidate Starts for Adgers\_83:

(Start: 5 @62085 has 29 MA's), (7, 62046), (8, 62010), (9, 62001),

Gene: Amore2\_79 Start: 61063, Stop: 60860, Start Num: 6

Candidate Starts for Amore2\_79:

(Start: 6 @61063 has 2 MA's),

Gene: Anamika\_77 Start: 62370, Stop: 62131, Start Num: 4

Candidate Starts for Anamika\_77:

(Start: 4 @62370 has 21 MA's), (7, 62322), (8, 62286), (9, 62277), (10, 62202),

Gene: Austin\_78 Start: 61061, Stop: 60858, Start Num: 6

Candidate Starts for Austin\_78:

(Start: 6 @61061 has 2 MA's),

Gene: Barbochs\_79 Start: 61462, Stop: 61241, Start Num: 5

Candidate Starts for Barbochs\_79:

(Start: 5 @61462 has 29 MA's), (7, 61423), (8, 61387), (9, 61378), (11, 61279),

Gene: Beaver\_83 Start: 63406, Stop: 63185, Start Num: 5

Candidate Starts for Beaver\_83:

(Start: 5 @63406 has 29 MA's), (7, 63367), (8, 63331), (9, 63322),

Gene: BenoitCattle\_81 Start: 62130, Stop: 61909, Start Num: 5

Candidate Starts for BenoitCattle\_81:

(Start: 5 @62130 has 29 MA's), (8, 62055), (9, 62046),

Gene: Berries\_78 Start: 62342, Stop: 62103, Start Num: 4

Candidate Starts for Berries\_78:

(Start: 4 @62342 has 21 MA's), (7, 62294), (8, 62258), (9, 62249), (10, 62174),

Gene: Bianmat\_78 Start: 62382, Stop: 62143, Start Num: 4

Candidate Starts for Bianmat\_78:

(Start: 4 @62382 has 21 MA's), (7, 62334), (8, 62298), (9, 62289), (10, 62214),

Gene: BirksAndSocks\_84 Start: 63528, Stop: 63307, Start Num: 5

Candidate Starts for BirksAndSocks\_84:

(Start: 5 @63528 has 29 MA's), (7, 63489), (8, 63453), (9, 63444),

Gene: Boneham\_83 Start: 63453, Stop: 63232, Start Num: 5

Candidate Starts for Boneham\_83:

(Start: 5 @63453 has 29 MA's), (7, 63414), (8, 63378), (9, 63369),

Gene: Breezic\_80 Start: 61673, Stop: 61452, Start Num: 5

Candidate Starts for Breezic\_80:

(Start: 5 @61673 has 29 MA's), (7, 61634), (8, 61598), (9, 61589), (11, 61490),

Gene: Butterball\_82 Start: 63458, Stop: 63237, Start Num: 5

Candidate Starts for Butterball\_82:

(Start: 5 @63458 has 29 MA's), (7, 63419), (8, 63383), (9, 63374),

Gene: CathyBurgh\_79 Start: 62193, Stop: 61972, Start Num: 5

Candidate Starts for CathyBurgh\_79:

(Start: 5 @62193 has 29 MA's), (7, 62154), (8, 62118), (9, 62109), (11, 62010),

Gene: Charianelly\_77 Start: 62092, Stop: 61853, Start Num: 4

Candidate Starts for Charianelly\_77:

(Start: 4 @62092 has 21 MA's), (7, 62044), (8, 62008), (9, 61999), (10, 61924),

Gene: Chelms\_80 Start: 62229, Stop: 62008, Start Num: 5

Candidate Starts for Chelms\_80:

(3, 62277), (Start: 5 @62229 has 29 MA's), (8, 62154), (9, 62145),

Gene: Dakiti\_81 Start: 63027, Stop: 62806, Start Num: 5

Candidate Starts for Dakiti\_81:

(3, 63075), (Start: 5 @63027 has 29 MA's), (8, 62952), (9, 62943),

Gene: Damp\_75 Start: 61256, Stop: 61017, Start Num: 4

Candidate Starts for Damp\_75:

(Start: 4 @61256 has 21 MA's), (7, 61208), (8, 61172), (9, 61163), (10, 61088),

Gene: Diabla\_86 Start: 63495, Stop: 63277, Start Num: 5

Candidate Starts for Diabla\_86:

(Start: 5 @63495 has 29 MA's), (7, 63456), (8, 63420), (9, 63411),

Gene: Eggsie\_78 Start: 60935, Stop: 60717, Start Num: 5

Candidate Starts for Eggsie\_78:

(Start: 5 @60935 has 29 MA's), (7, 60896), (8, 60860), (9, 60851),

Gene: Ekhein\_80 Start: 61363, Stop: 61142, Start Num: 5

Candidate Starts for Ekhein\_80:

(Start: 5 @61363 has 29 MA's), (7, 61324), (8, 61288), (9, 61279), (11, 61180),

Gene: Exiguo\_79 Start: 61369, Stop: 61148, Start Num: 5

Candidate Starts for Exiguo\_79:

(Start: 5 @61369 has 29 MA's), (7, 61330), (8, 61294), (9, 61285), (11, 61186),

Gene: FelixAlejandro\_84 Start: 63883, Stop: 63662, Start Num: 5

Candidate Starts for FelixAlejandro\_84:

(Start: 5 @63883 has 29 MA's), (7, 63844), (8, 63808), (9, 63799),

Gene: Flakey\_79 Start: 62179, Stop: 61958, Start Num: 5

Candidate Starts for Flakey\_79:

(Start: 5 @62179 has 29 MA's), (7, 62140), (8, 62104), (9, 62095), (11, 61996),

Gene: GMA7\_68 Start: 55277, Stop: 55074, Start Num: 6

Candidate Starts for GMA7\_68:

(Start: 6 @55277 has 2 MA's),

Gene: GTE7\_67 Start: 55308, Stop: 55105, Start Num: 6

Candidate Starts for GTE7\_67:

(Start: 6 @55308 has 2 MA's),

Gene: GalacticEye\_78 Start: 62053, Stop: 61814, Start Num: 4

Candidate Starts for GalacticEye\_78:

(Start: 4 @62053 has 21 MA's), (7, 62005), (8, 61969), (9, 61960), (10, 61885),

Gene: Gorko\_79 Start: 61280, Stop: 61059, Start Num: 5

Candidate Starts for Gorko\_79:

(Start: 5 @61280 has 29 MA's), (7, 61241), (8, 61205), (9, 61196), (11, 61097),

Gene: GourdThymes\_80 Start: 62220, Stop: 61999, Start Num: 5

Candidate Starts for GourdThymes\_80:

(Start: 5 @62220 has 29 MA's), (7, 62181), (8, 62145), (9, 62136), (11, 62037),

Gene: Guillaume\_77 Start: 62103, Stop: 61864, Start Num: 4

Candidate Starts for Guillaume\_77:

(Start: 4 @62103 has 21 MA's), (7, 62055), (8, 62019), (9, 62010), (10, 61935),

Gene: Hail2Pitt\_76 Start: 62579, Stop: 62340, Start Num: 4

Candidate Starts for Hail2Pitt\_76:

(Start: 4 @62579 has 21 MA's), (7, 62531), (8, 62495), (9, 62486), (10, 62411),

Gene: Harambe\_77 Start: 62370, Stop: 62131, Start Num: 4

Candidate Starts for Harambe\_77:

(Start: 4 @62370 has 21 MA's), (7, 62322), (8, 62286), (9, 62277), (10, 62202),

Gene: HayZem\_80 Start: 61061, Stop: 60858, Start Num: 6

Candidate Starts for HayZem\_80:

(Start: 6 @61061 has 2 MA's),

Gene: Hello\_77 Start: 62332, Stop: 62093, Start Num: 4

Candidate Starts for Hello\_77:

(Start: 4 @62332 has 21 MA's), (7, 62284), (8, 62248), (9, 62239), (10, 62164),

Gene: Hotorobo\_80 Start: 62243, Stop: 62022, Start Num: 5

Candidate Starts for Hotorobo\_80:

(Start: 5 @62243 has 29 MA's), (7, 62204), (8, 62168), (9, 62159), (11, 62060),

Gene: Jams\_78 Start: 61542, Stop: 61303, Start Num: 4

Candidate Starts for Jams\_78:

(Start: 4 @61542 has 21 MA's), (7, 61494), (8, 61458), (9, 61449), (10, 61374),

Gene: Jellybones\_81 Start: 63167, Stop: 62946, Start Num: 5

Candidate Starts for Jellybones\_81:

(Start: 5 @63167 has 29 MA's), (7, 63128), (8, 63092), (9, 63083),

Gene: John316\_83 Start: 63331, Stop: 63110, Start Num: 5

Candidate Starts for John316\_83:

(Start: 5 @63331 has 29 MA's), (7, 63292), (8, 63256), (9, 63247), (11, 63148),

Gene: Jormungandr\_77 Start: 62085, Stop: 61846, Start Num: 4

Candidate Starts for Jormungandr\_77:

(Start: 4 @62085 has 21 MA's), (7, 62037), (8, 62001), (9, 61992), (10, 61917),

Gene: Kaseim\_77 Start: 61527, Stop: 61288, Start Num: 4

Candidate Starts for Kaseim\_77:

(Start: 4 @61527 has 21 MA's), (7, 61479), (8, 61443), (9, 61434), (10, 61359),

Gene: Lahirium\_77 Start: 62607, Stop: 62368, Start Num: 4

Candidate Starts for Lahirium\_77:

(2, 62661), (Start: 4 @62607 has 21 MA's), (7, 62559), (8, 62523), (9, 62514), (10, 62439),

Gene: Lidong\_78 Start: 62342, Stop: 62103, Start Num: 4

Candidate Starts for Lidong\_78:

(Start: 4 @62342 has 21 MA's), (7, 62294), (8, 62258), (9, 62249), (10, 62174),

Gene: Linetti\_80 Start: 63254, Stop: 63033, Start Num: 5

Candidate Starts for Linetti\_80:

(3, 63302), (Start: 5 @63254 has 29 MA's), (8, 63179), (9, 63170),

Gene: Lizzo\_80 Start: 62193, Stop: 61972, Start Num: 5

Candidate Starts for Lizzo\_80:

(Start: 5 @62193 has 29 MA's), (7, 62154), (8, 62118), (9, 62109), (11, 62010),

Gene: Luker\_79 Start: 62560, Stop: 62321, Start Num: 4

Candidate Starts for Luker\_79:

(Start: 4 @62560 has 21 MA's), (7, 62512), (8, 62476), (9, 62467), (10, 62392),

Gene: Minos\_79 Start: 62084, Stop: 61845, Start Num: 4

Candidate Starts for Minos\_79:

(Start: 4 @62084 has 21 MA's), (7, 62036), (8, 62000), (9, 61991), (10, 61916),

Gene: Monty\_79 Start: 61406, Stop: 61185, Start Num: 5

Candidate Starts for Monty\_79:

(Start: 5 @61406 has 29 MA's), (7, 61367), (8, 61331), (9, 61322), (11, 61223),

Gene: MrWormie\_78 Start: 61245, Stop: 61006, Start Num: 4

Candidate Starts for MrWormie\_78:

(Start: 4 @61245 has 21 MA's), (7, 61197), (8, 61161), (9, 61152), (10, 61077),

Gene: Msay19\_84 Start: 63769, Stop: 63548, Start Num: 5

Candidate Starts for Msay19\_84:

(Start: 5 @63769 has 29 MA's), (7, 63730), (8, 63694), (9, 63685),

Gene: Neoevie\_77 Start: 62346, Stop: 62107, Start Num: 4

Candidate Starts for Neoevie\_77:

(Start: 4 @62346 has 21 MA's), (7, 62298), (8, 62262), (9, 62253), (10, 62178),

Gene: Newt\_79 Start: 62574, Stop: 62335, Start Num: 4

Candidate Starts for Newt\_79:

(Start: 4 @62574 has 21 MA's), (7, 62526), (8, 62490), (9, 62481), (10, 62406),

Gene: Nimi13\_77 Start: 62093, Stop: 61854, Start Num: 4

Candidate Starts for Nimi13\_77:

(Start: 4 @62093 has 21 MA's), (7, 62045), (8, 62009), (9, 62000), (10, 61925),

Gene: PierreThree\_79 Start: 62658, Stop: 62437, Start Num: 5

Candidate Starts for PierreThree\_79:

(3, 62706), (Start: 5 @62658 has 29 MA's), (8, 62583), (9, 62574),

Gene: PokyPuppy\_77 Start: 61929, Stop: 61708, Start Num: 5

Candidate Starts for PokyPuppy\_77:

(1, 62010), (Start: 5 @61929 has 29 MA's), (8, 61854), (9, 61845),

Gene: Poland\_85 Start: 63748, Stop: 63527, Start Num: 5

Candidate Starts for Poland\_85:

(Start: 5 @63748 has 29 MA's), (7, 63709), (8, 63673), (9, 63664),

Gene: RemRem\_81 Start: 61346, Stop: 61125, Start Num: 5

Candidate Starts for RemRem\_81:

(Start: 5 @61346 has 29 MA's), (7, 61307), (8, 61271), (9, 61262), (11, 61163),

Gene: RoyalG\_80 Start: 61930, Stop: 61712, Start Num: 5

Candidate Starts for RoyalG\_80:

(Start: 5 @61930 has 29 MA's), (7, 61891), (8, 61855), (9, 61846),

Gene: Sam12\_79 Start: 61369, Stop: 61148, Start Num: 5

Candidate Starts for Sam12\_79:

(Start: 5 @61369 has 29 MA's), (7, 61330), (8, 61294), (9, 61285), (11, 61186),

Gene: Shelley\_78 Start: 61569, Stop: 61330, Start Num: 4

Candidate Starts for Shelley\_78:

(Start: 4 @61569 has 21 MA's), (7, 61521), (8, 61485), (9, 61476), (10, 61401),

Gene: Sombrero\_81 Start: 61959, Stop: 61738, Start Num: 5

Candidate Starts for Sombrero\_81:

(Start: 5 @61959 has 29 MA's), (7, 61920), (8, 61884), (9, 61875),

Gene: Squibbles\_79 Start: 62223, Stop: 62002, Start Num: 5

Candidate Starts for Squibbles\_79:

(Start: 5 @62223 has 29 MA's), (7, 62184), (8, 62148), (9, 62139), (11, 62040),

Gene: SteveFrench\_79 Start: 62170, Stop: 61952, Start Num: 5

Candidate Starts for SteveFrench\_79:

(Start: 5 @62170 has 29 MA's), (7, 62131), (8, 62095), (9, 62086),

Gene: Sticker17\_78 Start: 62057, Stop: 61818, Start Num: 4

Candidate Starts for Sticker17\_78:

(Start: 4 @62057 has 21 MA's), (7, 62009), (8, 61973), (9, 61964), (10, 61889),

Gene: Teal\_77 Start: 62551, Stop: 62312, Start Num: 4

Candidate Starts for Teal\_77:

(Start: 4 @62551 has 21 MA's), (7, 62503), (8, 62467), (9, 62458), (10, 62383),



Gene: Woes\_77 Start: 62602, Stop: 62363, Start Num: 4

Candidate Starts for Woes\_77:

(Start: 4 @62602 has 21 MA's), (7, 62554), (8, 62518), (9, 62509), (10, 62434),