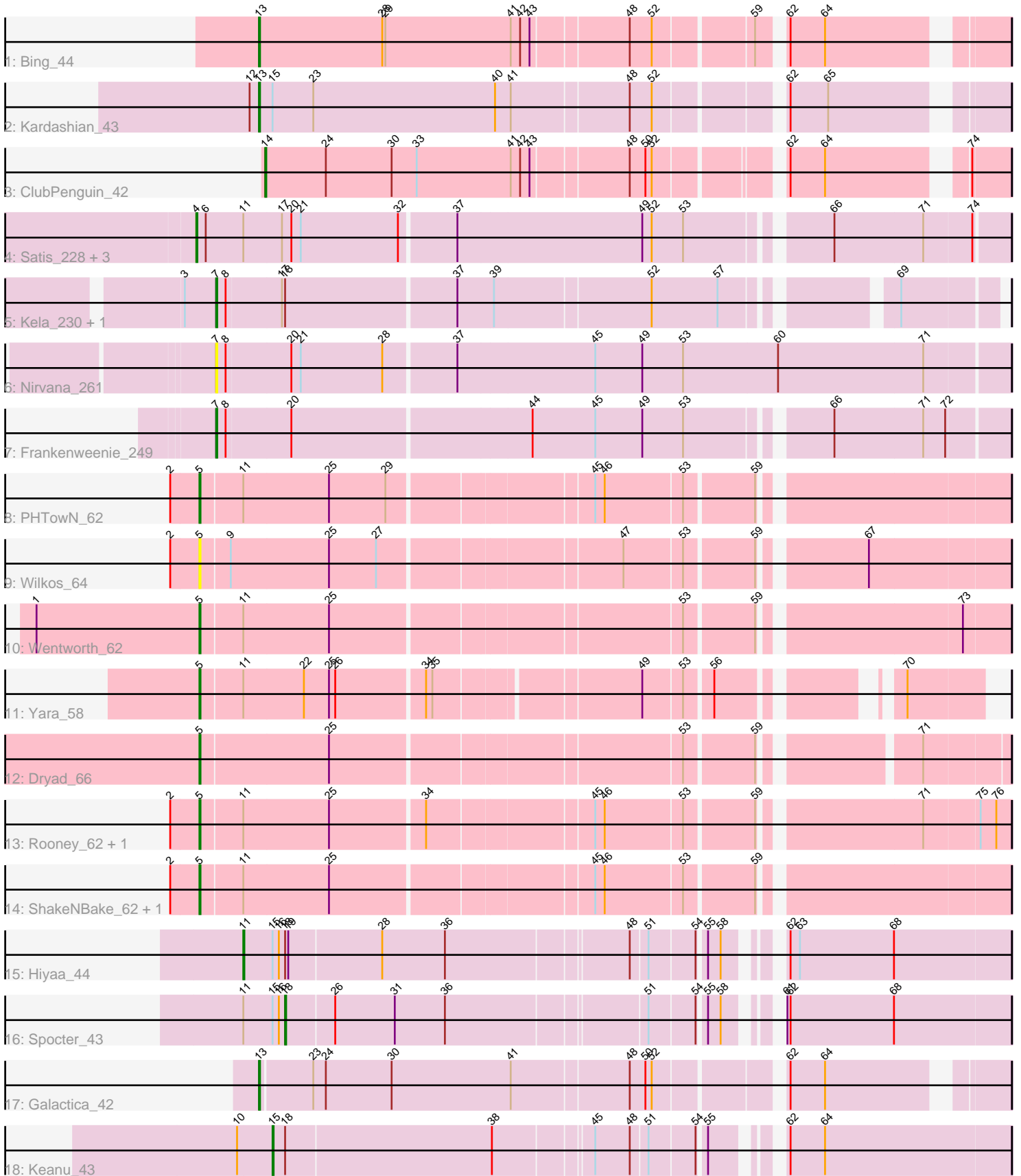# Pham 194306

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 194306 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194306 has 24 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Bing_44
• Track 2 : Kardashian_43
• Track 3 : ClubPenguin_42
• Track 4 : Satis_228, EhyElimayoE_231, Kradal_229, Quantum_227
• Track 5 : Kela_230, JustBecause_231
• Track 6 : Nirvana_261
• Track 7 : Frankenweenie_249
• Track 8 : PHTowN_62
• Track 9 : Wilkos_64
• Track 10 : Wentworth_62
• Track 11 : Yara_58
• Track 12 : Dryad_66
• Track 13 : Rooney_62, Gibson_62
• Track 14 : ShakeNBake_62, Lizz_62
• Track 15 : Hiyaa_44
• Track 16 : Spocter_43
• Track 17 : Galactica_42
• Track 18 : Keanu_43

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 8 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Dryad_66, Gibson_62, Lizz_62, PHTowN_62, Rooney_62, ShakeNBake_62, Wentworth_62, Wilkos_64, Yara_58,

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

Genes that do not have the "Most Annotated" start:
• Bing_44, ClubPenguin_42, EhyElimayoE_231, Frankenweenie_249, Galactica_42, Hiyaa_44, JustBecause_231, Kardashian_43, Keanu_43, Kela_230, Kradal_229,

Nirvana_261, Quantum_227, Satis_228, Spocter_43,

Summary by start number:

Start 4:
• Found in 4 of 24 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EhyElimayoE_231 (BM), Kradal_229 (BM), Quantum_227 (BM), Satis_228 (BM),

Start 5:
• Found in 9 of 24 (37.5%) of genes in pham
• Manual Annotations of this start: 8 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dryad_66 (BN), Gibson_62 (BN), Lizz_62 (BN), PHTowN_62 (BN), Rooney_62 (BN), ShakeNBake_62 (BN), Wentworth_62 (BN), Wilkos_64 (BN), Yara_58 (BN),

Start 7:
• Found in 4 of 24 (16.7%) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Frankenweenie_249 (BM), JustBecause_231 (BM), Kela_230 (BM), Nirvana_261 (BM),

Start 11:
• Found in 13 of 24 (54.2%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 7.7% of time when present
• Phage (with cluster) where this start called: Hiyaa_44 (BQ),

Start 13:
• Found in 3 of 24 (12.5%) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bing_44 (BI5), Galactica_42 (BQ), Kardashian_43 (BI6),

Start 14:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ClubPenguin_42 (BI7),

Start 15:
• Found in 4 of 24 (16.7%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Keanu_43 (BQ),

Start 18:
• Found in 5 of 24 (20.8%) of genes in pham

• Manual Annotations of this start: 1 of 22
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Spocter_43 (BQ),

Summary by clusters:

There are 6 clusters represented in this pham: BM, BN, BQ, BI6, BI7, BI5,

Info for manual annotations of cluster BI5:
•Start number 13 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:
•Start number 13 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:
•Start number 14 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster BM:
•Start number 4 was manually annotated 4 times for cluster BM.
•Start number 7 was manually annotated 3 times for cluster BM.

Info for manual annotations of cluster BN:
•Start number 5 was manually annotated 8 times for cluster BN.

Info for manual annotations of cluster BQ:
•Start number 11 was manually annotated 1 time for cluster BQ.
•Start number 13 was manually annotated 1 time for cluster BQ.
•Start number 15 was manually annotated 1 time for cluster BQ.
•Start number 18 was manually annotated 1 time for cluster BQ.

Gene Information:
Gene: Bing_44 Start: 29532, Stop: 30185, Start Num: 13
Candidate Starts for Bing_44:
(Start: 13 @29532 has 3 MA's), (28, 29649), (29, 29652), (41, 29772), (42, 29781), (43, 29790), (48, 29877), (52, 29898), (59, 29985), (62, 30003), (64, 30036),

Gene: ClubPenguin_42 Start: 28804, Stop: 29448, Start Num: 14
Candidate Starts for ClubPenguin_42:
(Start: 14 @28804 has 1 MA's), (24, 28861), (30, 28924), (33, 28948), (41, 29038), (42, 29047), (43, 29056), (48, 29143), (50, 29158), (52, 29164), (62, 29266), (64, 29299), (74, 29413),

Gene: Dryad_66 Start: 45069, Stop: 44365, Start Num: 5
Candidate Starts for Dryad_66:
(Start: 5 @45069 has 8 MA's), (25, 44949), (53, 44634), (59, 44571), (71, 44442),

Gene: EhyElimayoE_231 Start: 136388, Stop: 137125, Start Num: 4
Candidate Starts for EhyElimayoE_231:
(Start: 4 @136388 has 4 MA's), (6, 136397), (Start: 11 @136433 has 1 MA's), (17, 136469), (20, 136478), (21, 136487), (32, 136580), (37, 136631), (49, 136805), (52, 136814), (53, 136844), (66, 136964), (71, 137048), (74, 137093),

Gene: Frankenweenie_249 Start: 147539, Stop: 148255, Start Num: 7
Candidate Starts for Frankenweenie_249:
(Start: 7 @147539 has 3 MA's), (8, 147548), (20, 147608), (44, 147830), (45, 147890), (49, 147935), (53, 147974), (66, 148094), (71, 148178), (72, 148199),

Gene: Galactica_42 Start: 30036, Stop: 30689, Start Num: 13
Candidate Starts for Galactica_42:
(Start: 13 @30036 has 3 MA's), (23, 30084), (24, 30096), (30, 30159), (41, 30273), (48, 30381), (50, 30396), (52, 30402), (62, 30507), (64, 30540),

Gene: Gibson_62 Start: 44320, Stop: 43604, Start Num: 5
Candidate Starts for Gibson_62:
(2, 44347), (Start: 5 @44320 has 8 MA's), (Start: 11 @44281 has 1 MA's), (25, 44200), (34, 44113), (45, 43966), (46, 43957), (53, 43885), (59, 43822), (71, 43684), (75, 43633), (76, 43618),

Gene: Hiyaa_44 Start: 31405, Stop: 32076, Start Num: 11
Candidate Starts for Hiyaa_44:
(Start: 11 @31405 has 1 MA's), (Start: 15 @31432 has 1 MA's), (16, 31438), (Start: 18 @31444 has 1 MA's), (19, 31447), (28, 31534), (36, 31594), (48, 31759), (51, 31774), (54, 31816), (55, 31822), (58, 31834), (62, 31867), (63, 31876), (68, 31966),

Gene: JustBecause_231 Start: 134496, Stop: 135179, Start Num: 7
Candidate Starts for JustBecause_231:
(3, 134466), (Start: 7 @134496 has 3 MA's), (8, 134505), (17, 134556), (Start: 18 @134559 has 1 MA's), (37, 134718), (39, 134751), (52, 134895), (57, 134958), (69, 135093),

Gene: Kardashian_43 Start: 30111, Stop: 30767, Start Num: 13
Candidate Starts for Kardashian_43:
(12, 30102), (Start: 13 @30111 has 3 MA's), (Start: 15 @30123 has 1 MA's), (23, 30162), (40, 30336), (41, 30351), (48, 30459), (52, 30480), (62, 30585), (65, 30621),

Gene: Keanu_43 Start: 31141, Stop: 31785, Start Num: 15
Candidate Starts for Keanu_43:
(10, 31108), (Start: 15 @31141 has 1 MA's), (Start: 18 @31153 has 1 MA's), (38, 31348), (45, 31435), (48, 31468), (51, 31483), (54, 31525), (55, 31531), (62, 31576), (64, 31609),

Gene: Kela_230 Start: 135079, Stop: 135762, Start Num: 7
Candidate Starts for Kela_230:
(3, 135049), (Start: 7 @135079 has 3 MA's), (8, 135088), (17, 135139), (Start: 18 @135142 has 1 MA's), (37, 135301), (39, 135334), (52, 135478), (57, 135541), (69, 135676),

Gene: Kradal_229 Start: 136385, Stop: 137122, Start Num: 4
Candidate Starts for Kradal_229:
(Start: 4 @136385 has 4 MA's), (6, 136394), (Start: 11 @136430 has 1 MA's), (17, 136466), (20, 136475), (21, 136484), (32, 136577), (37, 136628), (49, 136802), (52, 136811), (53, 136841), (66, 136961), (71, 137045), (74, 137090),

Gene: Lizz_62 Start: 44158, Stop: 43442, Start Num: 5
Candidate Starts for Lizz_62:
(2, 44185), (Start: 5 @44158 has 8 MA's), (Start: 11 @44119 has 1 MA's), (25, 44038), (45, 43804), (46, 43795), (53, 43723), (59, 43660),

Gene: Nirvana_261 Start: 146399, Stop: 147139, Start Num: 7
Candidate Starts for Nirvana_261:
(Start: 7 @146399 has 3 MA's), (8, 146408), (20, 146468), (21, 146477), (28, 146555), (37, 146621), (45, 146750), (49, 146795), (53, 146834), (60, 146924), (71, 147062),

Gene: PHTowN_62 Start: 44156, Stop: 43440, Start Num: 5
Candidate Starts for PHTowN_62:
(2, 44183), (Start: 5 @44156 has 8 MA's), (Start: 11 @44117 has 1 MA's), (25, 44036), (29, 43982), (45, 43802), (46, 43793), (53, 43721), (59, 43658),

Gene: Quantum_227 Start: 136379, Stop: 137116, Start Num: 4
Candidate Starts for Quantum_227:
(Start: 4 @136379 has 4 MA's), (6, 136388), (Start: 11 @136424 has 1 MA's), (17, 136460), (20, 136469), (21, 136478), (32, 136571), (37, 136622), (49, 136796), (52, 136805), (53, 136835), (66, 136955), (71, 137039), (74, 137084),

Gene: Rooney_62 Start: 44317, Stop: 43601, Start Num: 5
Candidate Starts for Rooney_62:
(2, 44344), (Start: 5 @44317 has 8 MA's), (Start: 11 @44278 has 1 MA's), (25, 44197), (34, 44110), (45, 43963), (46, 43954), (53, 43882), (59, 43819), (71, 43681), (75, 43630), (76, 43615),

Gene: Satis_228 Start: 136722, Stop: 137459, Start Num: 4
Candidate Starts for Satis_228:
(Start: 4 @136722 has 4 MA's), (6, 136731), (Start: 11 @136767 has 1 MA's), (17, 136803), (20, 136812), (21, 136821), (32, 136914), (37, 136965), (49, 137139), (52, 137148), (53, 137178), (66, 137298), (71, 137382), (74, 137427),

Gene: ShakeNBake_62 Start: 44174, Stop: 43458, Start Num: 5
Candidate Starts for ShakeNBake_62:
(2, 44201), (Start: 5 @44174 has 8 MA's), (Start: 11 @44135 has 1 MA's), (25, 44054), (45, 43820), (46, 43811), (53, 43739), (59, 43676),

Gene: Spocter_43 Start: 31367, Stop: 31999, Start Num: 18
Candidate Starts for Spocter_43:
(Start: 11 @31328 has 1 MA's), (Start: 15 @31355 has 1 MA's), (16, 31361), (Start: 18 @31367 has 1 MA's), (26, 31412), (31, 31469), (36, 31517), (51, 31697), (54, 31739), (55, 31745), (58, 31757), (61, 31787), (62, 31790), (68, 31889),

Gene: Wentworth_62 Start: 44313, Stop: 43597, Start Num: 5
Candidate Starts for Wentworth_62:
(1, 44469), (Start: 5 @44313 has 8 MA's), (Start: 11 @44274 has 1 MA's), (25, 44193), (53, 43878), (59, 43815), (73, 43641),

Gene: Wilkos_64 Start: 44465, Stop: 43749, Start Num: 5
Candidate Starts for Wilkos_64:
(2, 44492), (Start: 5 @44465 has 8 MA's), (9, 44438), (25, 44345), (27, 44300), (47, 44084), (53, 44030), (59, 43967), (67, 43880),

Gene: Yara_58 Start: 43009, Stop: 42356, Start Num: 5
Candidate Starts for Yara_58:
(Start: 5 @43009 has 8 MA's), (Start: 11 @42970 has 1 MA's), (22, 42913), (25, 42889), (26, 42883), (34, 42802), (35, 42796), (49, 42616), (53, 42580), (56, 42556), (70, 42427),