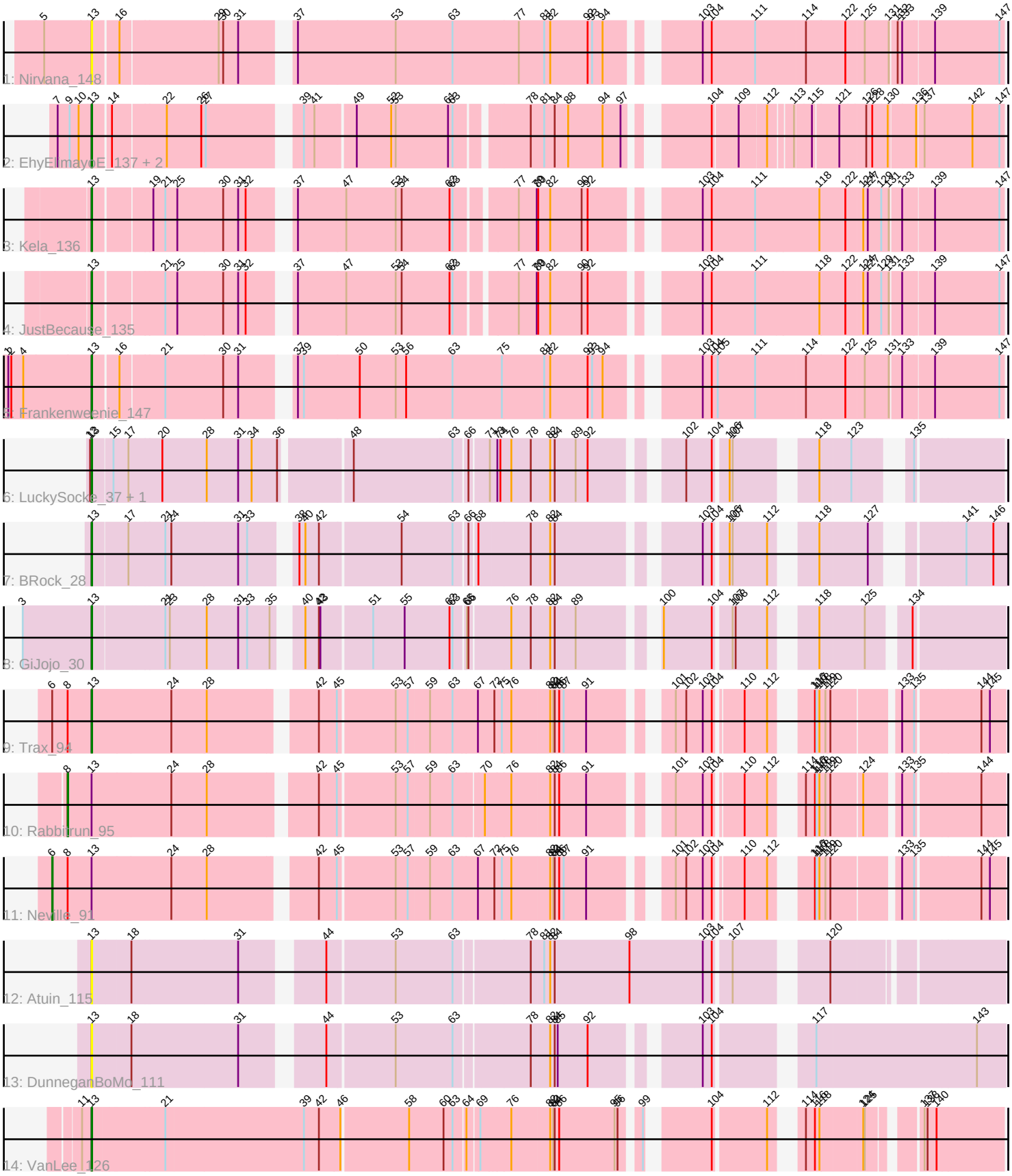
Pham 5106


1: Nirvana_148
2: EhyElmayoE_137 + 2
3: Kela_136
4: JustBecause_135
5: Frankenweenie_147
6: LuckySocke_37 + 1
7: BRock_28
8: GiJojo_30
9: Trax_94
10: Rabbitrun_95
11: Neville_91
12: Atuin_115
13: DunneganBoMd_111
14: VanLee_126

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 5106 Report

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

Pham number 5106 has 17 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Nirvana_148
• Track 2 : EhyElimayoE_137, Kradal_136, Satis_136
• Track 3 : Kela_136
• Track 4 : JustBecause_135
• Track 5 : Frankenweenie_147
• Track 6 : LuckySocke_37, Alone3_37
• Track 7 : BRock_28
• Track 8 : GiJojo_30
• Track 9 : Trax_94
• Track 10 : Rabbitrun_95
• Track 11 : Neville_91
• Track 12 : Atuin_115
• Track 13 : DunneganBoMo_111
• Track 14 : VanLee_126

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

The start number called the most often in the published annotations is 13, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alone3_37, Atuin_115, BRock_28, DunneganBoMo_111, EhyElimayoE_137, Frankenweenie_147, GiJojo_30, JustBecause_135, Kela_136, Kradal_136, LuckySocke_37, Nirvana_148, Satis_136, Trax_94, VanLee_126,

Genes that have the "Most Annotated" start but do not call it:
• Neville_91, Rabbitrun_95,

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

Summary by start number:

Start 6:

• Found in 2 of 17 (11.8%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Neville_91 (DU2),

Start 8:
• Found in 3 of 17 (17.6%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Rabbitrun_95 (DU2),

Start 13:
• Found in 17 of 17 (100.0%) of genes in pham
• Manual Annotations of this start: 12 of 14
• Called 88.2% of time when present
• Phage (with cluster) where this start called: Alone3_37 (BS), Atuin_115 (FC), BRock_28 (BS), DunneganBoMo_111 (FC), EhyElimayoE_137 (BM), Frankenweenie_147 (BM), GiJojo_30 (BS), JustBecause_135 (BM), Kela_136 (BM), Kradal_136 (BM), LuckySocke_37 (BS), Nirvana_148 (BM), Satis_136 (BM), Trax_94 (DU2), VanLee_126 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: BM, DU2, FC, singleton, BS,

Info for manual annotations of cluster BM:
•Start number 13 was manually annotated 6 times for cluster BM.

Info for manual annotations of cluster BS:
•Start number 13 was manually annotated 4 times for cluster BS.

Info for manual annotations of cluster DU2:
•Start number 6 was manually annotated 1 time for cluster DU2.
•Start number 8 was manually annotated 1 time for cluster DU2.
•Start number 13 was manually annotated 1 time for cluster DU2.

Gene Information:

Gene: Alone3_37 Start: 11147, Stop: 12733, Start Num: 13
Candidate Starts for Alone3_37:
(12, 11144), (Start: 13 @11147 has 12 MA's), (15, 11186), (17, 11216), (20, 11279), (28, 11366), (31, 11429), (34, 11456), (36, 11507), (48, 11633), (63, 11828), (66, 11852), (71, 11888), (73, 11903), (74, 11909), (76, 11930), (78, 11969), (82, 12005), (84, 12014), (89, 12056), (92, 12080), (102, 12224), (104, 12275), (106, 12299), (107, 12305), (118, 12434), (123, 12494), (135, 12566),

Gene: Atuin_115 Start: 92024, Stop: 93667, Start Num: 13
Candidate Starts for Atuin_115:
(Start: 13 @92024 has 12 MA's), (18, 92099), (31, 92309), (44, 92444), (53, 92573), (63, 92684), (78, 92822), (81, 92846), (82, 92858), (84, 92867), (98, 93017), (103, 93164), (104, 93182), (107, 93212), (120, 93362),

Gene: BRock_28 Start: 9202, Stop: 10773, Start Num: 13
Candidate Starts for BRock_28:
(Start: 13 @9202 has 12 MA's), (17, 9271), (21, 9340), (24, 9352), (31, 9484), (33, 9502), (38, 9571), (40, 9583), (42, 9610), (54, 9766), (63, 9868), (66, 9892), (68, 9904), (78, 10003), (82, 10039), (84, 10048), (103, 10291), (104, 10309), (106, 10333), (107, 10339), (112, 10408), (118, 10468), (127, 10555), (141, 10690), (146, 10744),

Gene: DunneganBoMo_111 Start: 87867, Stop: 89492, Start Num: 13
Candidate Starts for DunneganBoMo_111:
(Start: 13 @87867 has 12 MA's), (18, 87942), (31, 88152), (44, 88287), (53, 88416), (63, 88527), (78, 88665), (82, 88701), (84, 88710), (85, 88716), (92, 88776), (103, 88950), (104, 88968), (117, 89121), (143, 89436),

Gene: EhyElimayoE_137 Start: 86895, Stop: 85282, Start Num: 13
Candidate Starts for EhyElimayoE_137:
(7, 86961), (9, 86937), (10, 86919), (Start: 13 @86895 has 12 MA's), (14, 86862), (22, 86760), (26, 86691), (27, 86682), (39, 86526), (41, 86505), (49, 86430), (52, 86361), (53, 86352), (61, 86250), (63, 86241), (78, 86115), (81, 86088), (84, 86067), (88, 86040), (94, 85971), (97, 85935), (104, 85809), (109, 85764), (112, 85713), (113, 85671), (115, 85641), (121, 85593), (126, 85545), (128, 85533), (130, 85503), (136, 85452), (137, 85440), (142, 85344), (147, 85290),

Gene: Frankenweenie_147 Start: 92364, Stop: 90673, Start Num: 13
Candidate Starts for Frankenweenie_147:
(1, 92529), (2, 92523), (4, 92499), (Start: 13 @92364 has 12 MA's), (16, 92316), (21, 92232), (30, 92118), (31, 92088), (37, 92007), (39, 91995), (50, 91884), (53, 91812), (56, 91791), (63, 91701), (75, 91602), (81, 91518), (82, 91506), (92, 91431), (93, 91422), (94, 91401), (103, 91257), (104, 91239), (105, 91227), (111, 91152), (114, 91053), (122, 90975), (125, 90939), (131, 90891), (133, 90870), (139, 90810), (147, 90681),

Gene: GiJojo_30 Start: 10028, Stop: 11614, Start Num: 13
Candidate Starts for GiJojo_30:
(3, 9890), (Start: 13 @10028 has 12 MA's), (21, 10163), (23, 10172), (28, 10244), (31, 10307), (33, 10325), (35, 10370), (40, 10406), (42, 10433), (43, 10436), (51, 10532), (55, 10595), (62, 10682), (63, 10688), (65, 10709), (66, 10712), (76, 10790), (78, 10829), (82, 10865), (84, 10874), (89, 10916), (100, 11039), (104, 11135), (107, 11165), (108, 11171), (112, 11234), (118, 11294), (125, 11375), (134, 11441),

Gene: JustBecause_135 Start: 86433, Stop: 84769, Start Num: 13
Candidate Starts for JustBecause_135:
(Start: 13 @86433 has 12 MA's), (21, 86301), (25, 86277), (30, 86187), (31, 86157), (32, 86142), (37, 86076), (47, 85980), (53, 85881), (54, 85869), (62, 85776), (63, 85770), (77, 85662), (79, 85626), (80, 85623), (82, 85599), (90, 85536), (92, 85524), (103, 85350), (104, 85332), (111, 85245), (118, 85119), (122, 85068), (124, 85035), (127, 85026), (129, 84999), (131, 84984), (133, 84966), (139, 84906), (147, 84777),

Gene: Kela_136 Start: 86313, Stop: 84649, Start Num: 13
Candidate Starts for Kela_136:
(Start: 13 @86313 has 12 MA's), (19, 86205), (21, 86181), (25, 86157), (30, 86067), (31, 86037), (32, 86022), (37, 85956), (47, 85860), (53, 85761), (54, 85749), (62, 85656), (63, 85650), (77, 85542), (79, 85506), (80, 85503), (82, 85479), (90, 85416), (92, 85404), (103, 85230), (104, 85212), (111, 85125), (118, 84999), (122, 84948), (124, 84915), (127, 84906), (129, 84879), (131, 84864), (133, 84846), (139, 84786), (147, 84657),

Gene: Kradal_136 Start: 86892, Stop: 85279, Start Num: 13
Candidate Starts for Kradal_136:
(7, 86958), (9, 86934), (10, 86916), (Start: 13 @86892 has 12 MA's), (14, 86859), (22, 86757), (26, 86688), (27, 86679), (39, 86523), (41, 86502), (49, 86427), (52, 86358), (53, 86349), (61, 86247), (63, 86238), (78, 86112), (81, 86085), (84, 86064), (88, 86037), (94, 85968), (97, 85932), (104, 85806), (109, 85761), (112, 85710), (113, 85668), (115, 85638), (121, 85590), (126, 85542), (128, 85530), (130, 85500), (136, 85449), (137, 85437), (142, 85341), (147, 85287),

Gene: LuckySocke_37 Start: 10965, Stop: 12551, Start Num: 13
Candidate Starts for LuckySocke_37:
(12, 10962), (Start: 13 @10965 has 12 MA's), (15, 11004), (17, 11034), (20, 11097), (28, 11184), (31, 11247), (34, 11274), (36, 11325), (48, 11451), (63, 11646), (66, 11670), (71, 11706), (73, 11721), (74, 11727), (76, 11748), (78, 11787), (82, 11823), (84, 11832), (89, 11874), (92, 11898), (102, 12042), (104, 12093), (106, 12117), (107, 12123), (118, 12252), (123, 12312), (135, 12384),

Gene: Neville_91 Start: 56525, Stop: 58201, Start Num: 6
Candidate Starts for Neville_91:
(Start: 6 @56525 has 1 MA's), (Start: 8 @56555 has 1 MA's), (Start: 13 @56603 has 12 MA's), (24, 56759), (28, 56825), (42, 57011), (45, 57047), (53, 57155), (57, 57179), (59, 57221), (63, 57263), (67, 57311), (72, 57344), (75, 57359), (76, 57377), (82, 57452), (83, 57458), (84, 57461), (86, 57470), (87, 57479), (91, 57524), (101, 57647), (102, 57668), (103, 57701), (104, 57719), (110, 57767), (112, 57812), (116, 57863), (117, 57866), (118, 57872), (119, 57884), (120, 57893), (133, 58010), (135, 58034), (144, 58157), (145, 58172),

Gene: Nirvana_148 Start: 90786, Stop: 89095, Start Num: 13
Candidate Starts for Nirvana_148:
(5, 90879), (Start: 13 @90786 has 12 MA's), (16, 90738), (29, 90549), (30, 90540), (31, 90510), (37, 90429), (53, 90234), (63, 90123), (77, 89991), (81, 89940), (82, 89928), (92, 89853), (93, 89844), (94, 89823), (103, 89679), (104, 89661), (111, 89574), (114, 89475), (122, 89397), (125, 89361), (131, 89313), (132, 89301), (133, 89292), (139, 89232), (147, 89103),

Gene: Rabbitrun_95 Start: 57324, Stop: 58970, Start Num: 8
Candidate Starts for Rabbitrun_95:
(Start: 8 @57324 has 1 MA's), (Start: 13 @57372 has 12 MA's), (24, 57528), (28, 57594), (42, 57786), (45, 57822), (53, 57930), (57, 57954), (59, 57996), (63, 58038), (70, 58095), (76, 58146), (82, 58221), (84, 58230), (86, 58239), (91, 58293), (101, 58416), (103, 58470), (104, 58488), (110, 58536), (112, 58581), (114, 58614), (116, 58632), (117, 58635), (118, 58641), (119, 58653), (120, 58662), (124, 58719), (133, 58779), (135, 58803), (144, 58926),

Gene: Satis_136 Start: 86888, Stop: 85275, Start Num: 13
Candidate Starts for Satis_136:
(7, 86954), (9, 86930), (10, 86912), (Start: 13 @86888 has 12 MA's), (14, 86855), (22, 86753), (26, 86684), (27, 86675), (39, 86519), (41, 86498), (49, 86423), (52, 86354), (53, 86345), (61, 86243), (63, 86234), (78, 86108), (81, 86081), (84, 86060), (88, 86033), (94, 85964), (97, 85928), (104, 85802), (109, 85757), (112, 85706), (113, 85664), (115, 85634), (121, 85586), (126, 85538), (128, 85526), (130, 85496), (136, 85445), (137, 85433), (142, 85337), (147, 85283),

Gene: Trax_94 Start: 57598, Stop: 59196, Start Num: 13
Candidate Starts for Trax_94:
(Start: 6 @57520 has 1 MA's), (Start: 8 @57550 has 1 MA's), (Start: 13 @57598 has 12 MA's), (24, 57754), (28, 57820), (42, 58006), (45, 58042), (53, 58150), (57, 58174), (59, 58216), (63, 58258), (67, 58306), (72, 58339), (75, 58354), (76, 58372), (82, 58447), (83, 58453), (84, 58456), (86, 58465), (87,

58474), (91, 58519), (101, 58642), (102, 58663), (103, 58696), (104, 58714), (110, 58762), (112, 58807), (116, 58858), (117, 58861), (118, 58867), (119, 58879), (120, 58888), (133, 59005), (135, 59029), (144, 59152), (145, 59167),

Gene: VanLee_126 Start: 65751, Stop: 67367, Start Num: 13
Candidate Starts for VanLee_126:
(11, 65733), (Start: 13 @65751 has 12 MA's), (21, 65889), (39, 66162), (42, 66192), (46, 66234), (58, 66363), (60, 66432), (63, 66447), (64, 66468), (69, 66489), (76, 66546), (82, 66621), (83, 66627), (84, 66630), (86, 66639), (95, 66750), (96, 66756), (99, 66786), (104, 66888), (112, 66987), (114, 67020), (116, 67038), (118, 67047), (124, 67128), (125, 67131), (137, 67212), (138, 67218), (140, 67236),