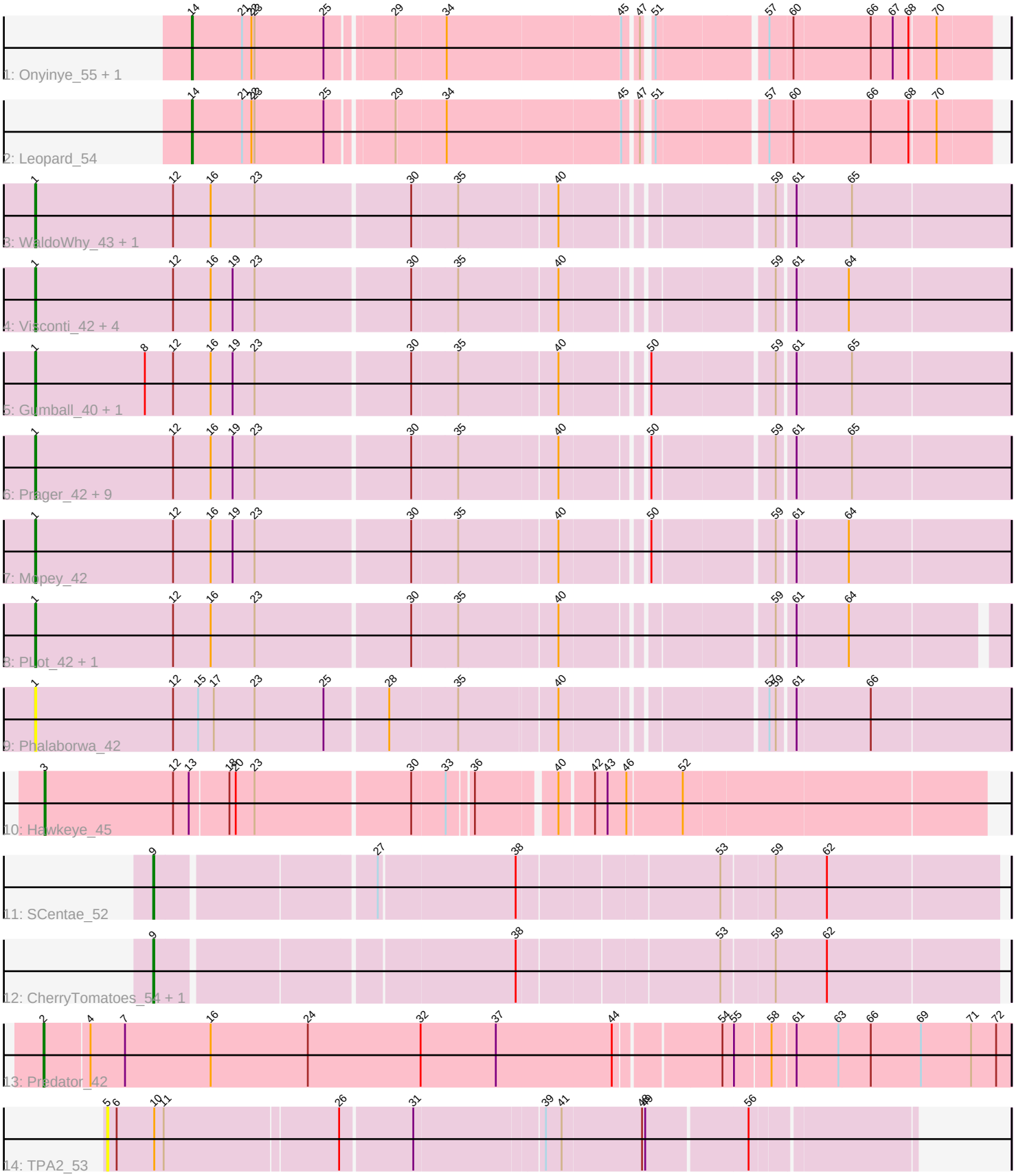
Pham 311857


1: Onyinye_55 + 1
2: Leopard_54
3: WaldoWhy_43 + 1
4: Visconti_42 + 4
5: Gumball_40 + 1
6: Prager_42 + 9
7: Mopey_42
8: PLot_42 + 1
9: Phalaborwa_42
10: Hawkeye_45
11: SCentae_52
12: CherryTomatoes_54 + 1
13: Predator_42
14: TPA2_53

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 311857 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311857 has 32 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Onyinye_55, Aikoy_55
• Track 2 : Leopard_54
• Track 3 : WaldoWhy_43, Chill_43
• Track 4 : Visconti_42, Helpful_43, Giuseppe_42, Troll4_42, Delton_42
• Track 5 : Gumball_40, SirHarley_41
• Track 6 : Prager_42, SuperheroCarly_42, Penelope2018_42, KandZ_42, Nova_41, Adjutor_42, Butterscotch_41, BigMama_40, Thoth_42, PBI1_41
• Track 7 : Mopey_42
• Track 8 : PLot_42, Erk16_41
• Track 9 : Phalaborwa_42
• Track 10 : Hawkeye_45
• Track 11 : SCentae_52
• Track 12 : CherryTomatoes_54, Pupper_52
• Track 13 : Predator_42
• Track 14 : TPA2_53

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

The start number called the most often in the published annotations is 1, it was called in 22 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_42, BigMama_40, Butterscotch_41, Chill_43, Delton_42, Erk16_41, Giuseppe_42, Gumball_40, Helpful_43, KandZ_42, Mopey_42, Nova_41, PBI1_41, PLot_42, Penelope2018_42, Phalaborwa_42, Prager_42, SirHarley_41, SuperheroCarly_42, Thoth_42, Troll4_42, Visconti_42, WaldoWhy_43,

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

Genes that do not have the "Most Annotated" start:
• Aikoy_55, CherryTomatoes_54, Hawkeye_45, Leopard_54, Onyinye_55, Predator_42, Pupper_52, SCentae_52, TPA2_53,

Summary by start number:

Start 1:
• Found in 23 of 32 (71.9%) of genes in pham
• Manual Annotations of this start: 22 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adjutor_42 (D1), BigMama_40 (D1), Butterscotch_41 (D1), Chill_43 (D1), Delton_42 (D1), Erk16_41 (D1), Giuseppe_42 (D1), Gumball_40 (D1), Helpful_43 (D1), KandZ_42 (D1), Mopey_42 (D1), Nova_41 (D1), PBI1_41 (D1), PLot_42 (D1), Penelope2018_42 (D1), Phalaborwa_42 (D1), Prager_42 (D1), SirHarley_41 (D1), SuperheroCarly_42 (D1), Thoth_42 (D1), Troll4_42 (D1), Visconti_42 (D1), WaldoWhy_43 (D1),

Start 2:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Predator_42 (H1),

Start 3:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hawkeye_45 (D2),

Start 5:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TPA2_53 (singleton),

Start 9:
• Found in 3 of 32 (9.4%) of genes in pham
• Manual Annotations of this start: 3 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_54 (DO), Pupper_52 (DO), SCentae_52 (DO),

Start 14:
• Found in 3 of 32 (9.4%) of genes in pham
• Manual Annotations of this start: 3 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aikoy_55 (AE), Leopard_54 (AE), Onyinye_55 (AE),

Summary by clusters:

There are 6 clusters represented in this pham: DO, singleton, AE, H1, D2, D1,

Info for manual annotations of cluster AE:
•Start number 14 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster D1:

•Start number 1 was manually annotated 22 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 3 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DO:
•Start number 9 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster H1:
•Start number 2 was manually annotated 1 time for cluster H1.

Gene Information:

Gene: Adjutor_42 Start: 35432, Stop: 34551, Start Num: 1
Candidate Starts for Adjutor_42:
(Start: 1 @35432 has 22 MA's), (12, 35300), (16, 35264), (19, 35243), (23, 35222), (30, 35078), (35, 35036), (40, 34946), (50, 34874), (59, 34766), (61, 34751), (65, 34700),

Gene: Aikoy_55 Start: 40551, Stop: 41255, Start Num: 14
Candidate Starts for Aikoy_55:
(Start: 14 @40551 has 3 MA's), (21, 40599), (22, 40608), (23, 40611), (25, 40677), (29, 40734), (34, 40779), (45, 40938), (47, 40950), (51, 40956), (57, 41052), (60, 41073), (66, 41145), (67, 41166), (68, 41181), (70, 41205),

Gene: BigMama_40 Start: 35508, Stop: 34627, Start Num: 1
Candidate Starts for BigMama_40:
(Start: 1 @35508 has 22 MA's), (12, 35376), (16, 35340), (19, 35319), (23, 35298), (30, 35154), (35, 35112), (40, 35022), (50, 34950), (59, 34842), (61, 34827), (65, 34776),

Gene: Butterscotch_41 Start: 35492, Stop: 34611, Start Num: 1
Candidate Starts for Butterscotch_41:
(Start: 1 @35492 has 22 MA's), (12, 35360), (16, 35324), (19, 35303), (23, 35282), (30, 35138), (35, 35096), (40, 35006), (50, 34934), (59, 34826), (61, 34811), (65, 34760),

Gene: CherryTomatoes_54 Start: 17569, Stop: 18327, Start Num: 9
Candidate Starts for CherryTomatoes_54:
(Start: 9 @17569 has 3 MA's), (38, 17890), (53, 18070), (59, 18118), (62, 18166),

Gene: Chill_43 Start: 35498, Stop: 34617, Start Num: 1
Candidate Starts for Chill_43:
(Start: 1 @35498 has 22 MA's), (12, 35366), (16, 35330), (23, 35288), (30, 35144), (35, 35102), (40, 35012), (59, 34832), (61, 34817), (65, 34766),

Gene: Delton_42 Start: 35504, Stop: 34623, Start Num: 1
Candidate Starts for Delton_42:
(Start: 1 @35504 has 22 MA's), (12, 35372), (16, 35336), (19, 35315), (23, 35294), (30, 35150), (35, 35108), (40, 35018), (59, 34838), (61, 34823), (64, 34775),

Gene: Erk16_41 Start: 35489, Stop: 34620, Start Num: 1
Candidate Starts for Erk16_41:

(Start: 1 @35489 has 22 MA's), (12, 35357), (16, 35321), (23, 35279), (30, 35135), (35, 35093), (40, 35003), (59, 34823), (61, 34808), (64, 34760),

Gene: Giuseppe_42 Start: 35481, Stop: 34612, Start Num: 1
Candidate Starts for Giuseppe_42:
(Start: 1 @35481 has 22 MA's), (12, 35349), (16, 35313), (19, 35292), (23, 35271), (30, 35127), (35, 35085), (40, 34995), (59, 34815), (61, 34800), (64, 34752),

Gene: Gumball_40 Start: 35445, Stop: 34561, Start Num: 1
Candidate Starts for Gumball_40:
(Start: 1 @35445 has 22 MA's), (8, 35340), (12, 35313), (16, 35277), (19, 35256), (23, 35235), (30, 35091), (35, 35049), (40, 34959), (50, 34887), (59, 34776), (61, 34761), (65, 34710),

Gene: Hawkeye_45 Start: 35438, Stop: 34584, Start Num: 3
Candidate Starts for Hawkeye_45:
(Start: 3 @35438 has 1 MA's), (12, 35315), (13, 35300), (18, 35264), (20, 35258), (23, 35240), (30, 35096), (33, 35066), (36, 35045), (40, 34976), (42, 34946), (43, 34934), (46, 34916), (52, 34865),

Gene: Helpful_43 Start: 35480, Stop: 34611, Start Num: 1
Candidate Starts for Helpful_43:
(Start: 1 @35480 has 22 MA's), (12, 35348), (16, 35312), (19, 35291), (23, 35270), (30, 35126), (35, 35084), (40, 34994), (59, 34814), (61, 34799), (64, 34751),

Gene: KandZ_42 Start: 35592, Stop: 34711, Start Num: 1
Candidate Starts for KandZ_42:
(Start: 1 @35592 has 22 MA's), (12, 35460), (16, 35424), (19, 35403), (23, 35382), (30, 35238), (35, 35196), (40, 35106), (50, 35034), (59, 34926), (61, 34911), (65, 34860),

Gene: Leopard_54 Start: 40836, Stop: 41540, Start Num: 14
Candidate Starts for Leopard_54:
(Start: 14 @40836 has 3 MA's), (21, 40884), (22, 40893), (23, 40896), (25, 40962), (29, 41019), (34, 41064), (45, 41223), (47, 41235), (51, 41241), (57, 41337), (60, 41358), (66, 41430), (68, 41466), (70, 41490),

Gene: Mopey_42 Start: 35492, Stop: 34611, Start Num: 1
Candidate Starts for Mopey_42:
(Start: 1 @35492 has 22 MA's), (12, 35360), (16, 35324), (19, 35303), (23, 35282), (30, 35138), (35, 35096), (40, 35006), (50, 34934), (59, 34826), (61, 34811), (64, 34763),

Gene: Nova_41 Start: 35918, Stop: 35037, Start Num: 1
Candidate Starts for Nova_41:
(Start: 1 @35918 has 22 MA's), (12, 35786), (16, 35750), (19, 35729), (23, 35708), (30, 35564), (35, 35522), (40, 35432), (50, 35360), (59, 35252), (61, 35237), (65, 35186),

Gene: Onyinye_55 Start: 40718, Stop: 41422, Start Num: 14
Candidate Starts for Onyinye_55:
(Start: 14 @40718 has 3 MA's), (21, 40766), (22, 40775), (23, 40778), (25, 40844), (29, 40901), (34, 40946), (45, 41105), (47, 41117), (51, 41123), (57, 41219), (60, 41240), (66, 41312), (67, 41333), (68, 41348), (70, 41372),

Gene: PBI1_41 Start: 35423, Stop: 34542, Start Num: 1
Candidate Starts for PBI1_41:

(Start: 1 @35423 has 22 MA's), (12, 35291), (16, 35255), (19, 35234), (23, 35213), (30, 35069), (35, 35027), (40, 34937), (50, 34865), (59, 34757), (61, 34742), (65, 34691),

Gene: PLot_42 Start: 35483, Stop: 34614, Start Num: 1
Candidate Starts for PLot_42:
(Start: 1 @35483 has 22 MA's), (12, 35351), (16, 35315), (23, 35273), (30, 35129), (35, 35087), (40, 34997), (59, 34817), (61, 34802), (64, 34754),

Gene: Penelope2018_42 Start: 35492, Stop: 34611, Start Num: 1
Candidate Starts for Penelope2018_42:
(Start: 1 @35492 has 22 MA's), (12, 35360), (16, 35324), (19, 35303), (23, 35282), (30, 35138), (35, 35096), (40, 35006), (50, 34934), (59, 34826), (61, 34811), (65, 34760),

Gene: Phalaborwa_42 Start: 35515, Stop: 34637, Start Num: 1
Candidate Starts for Phalaborwa_42:
(Start: 1 @35515 has 22 MA's), (12, 35383), (15, 35359), (17, 35344), (23, 35305), (25, 35239), (28, 35182), (35, 35119), (40, 35032), (57, 34858), (59, 34852), (61, 34837), (66, 34768),

Gene: Prager_42 Start: 35504, Stop: 34623, Start Num: 1
Candidate Starts for Prager_42:
(Start: 1 @35504 has 22 MA's), (12, 35372), (16, 35336), (19, 35315), (23, 35294), (30, 35150), (35, 35108), (40, 35018), (50, 34946), (59, 34838), (61, 34823), (65, 34772),

Gene: Predator_42 Start: 35912, Stop: 36811, Start Num: 2
Candidate Starts for Predator_42:
(Start: 2 @35912 has 1 MA's), (4, 35954), (7, 35987), (16, 36068), (24, 36161), (32, 36269), (37, 36341), (44, 36452), (54, 36545), (55, 36554), (58, 36587), (61, 36608), (63, 36647), (66, 36677), (69, 36725), (71, 36773), (72, 36797),

Gene: Pupper_52 Start: 17408, Stop: 18166, Start Num: 9
Candidate Starts for Pupper_52:
(Start: 9 @17408 has 3 MA's), (38, 17729), (53, 17909), (59, 17957), (62, 18005),

Gene: SCentae_52 Start: 17425, Stop: 18183, Start Num: 9
Candidate Starts for SCentae_52:
(Start: 9 @17425 has 3 MA's), (27, 17620), (38, 17746), (53, 17926), (59, 17974), (62, 18022),

Gene: SirHarley_41 Start: 35427, Stop: 34543, Start Num: 1
Candidate Starts for SirHarley_41:
(Start: 1 @35427 has 22 MA's), (8, 35322), (12, 35295), (16, 35259), (19, 35238), (23, 35217), (30, 35073), (35, 35031), (40, 34941), (50, 34869), (59, 34758), (61, 34743), (65, 34692),

Gene: SuperheroCarly_42 Start: 35354, Stop: 34473, Start Num: 1
Candidate Starts for SuperheroCarly_42:
(Start: 1 @35354 has 22 MA's), (12, 35222), (16, 35186), (19, 35165), (23, 35144), (30, 35000), (35, 34958), (40, 34868), (50, 34796), (59, 34688), (61, 34673), (65, 34622),

Gene: TPA2_53 Start: 40141, Stop: 39410, Start Num: 5
Candidate Starts for TPA2_53:
(5, 40141), (6, 40132), (10, 40096), (11, 40087), (26, 39925), (31, 39859), (39, 39742), (41, 39727), (48, 39652), (49, 39649), (56, 39556),

Gene: Thoth_42 Start: 35489, Stop: 34608, Start Num: 1

Candidate Starts for Thoth_42:
(Start: 1 @35489 has 22 MA's), (12, 35357), (16, 35321), (19, 35300), (23, 35279), (30, 35135), (35, 35093), (40, 35003), (50, 34931), (59, 34823), (61, 34808), (65, 34757),

Gene: Troll4_42 Start: 35493, Stop: 34612, Start Num: 1
Candidate Starts for Troll4_42:
(Start: 1 @35493 has 22 MA's), (12, 35361), (16, 35325), (19, 35304), (23, 35283), (30, 35139), (35, 35097), (40, 35007), (59, 34827), (61, 34812), (64, 34764),

Gene: Visconti_42 Start: 35502, Stop: 34621, Start Num: 1
Candidate Starts for Visconti_42:
(Start: 1 @35502 has 22 MA's), (12, 35370), (16, 35334), (19, 35313), (23, 35292), (30, 35148), (35, 35106), (40, 35016), (59, 34836), (61, 34821), (64, 34773),

Gene: WaldoWhy_43 Start: 35498, Stop: 34617, Start Num: 1
Candidate Starts for WaldoWhy_43:
(Start: 1 @35498 has 22 MA's), (12, 35366), (16, 35330), (23, 35288), (30, 35144), (35, 35102), (40, 35012), (59, 34832), (61, 34817), (65, 34766),