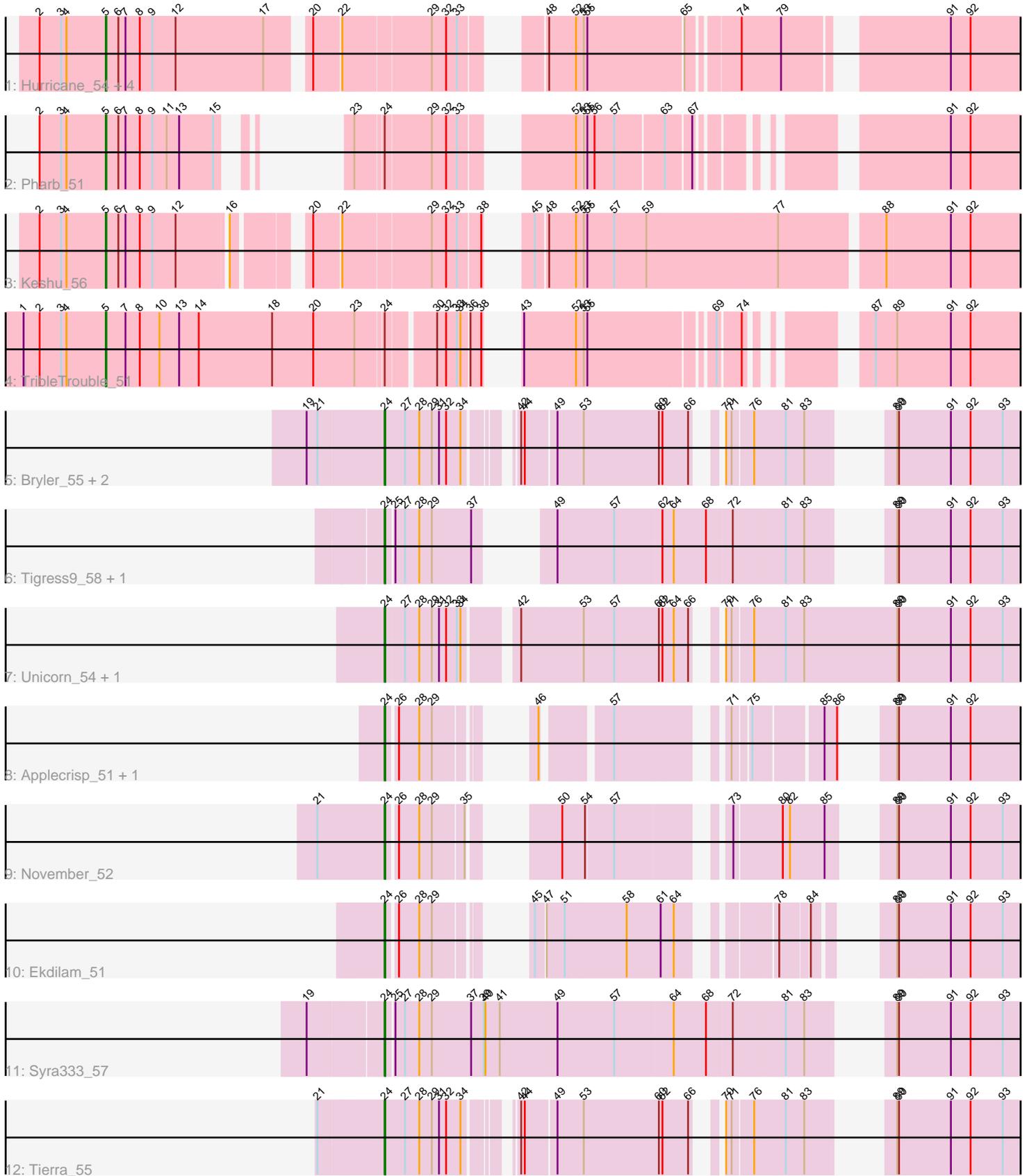# Pham 284185

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 284185 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284185 has 21 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Hurricane_54, Pixie_53, ShedlockHolmes_55, Lea83_54, TBond007_52
• Track 2 : Pharb_51
• Track 3 : Keshu_56
• Track 4 : TribleTrouble_51
• Track 5 : Bryler_55, Cain_55, Phrank_55
• Track 6 : Tigress9_58, Krueger_58
• Track 7 : Unicorn_54, PhelpsODU_54
• Track 8 : Applecrisp_51, Ellie_50
• Track 9 : November_52
• Track 10 : Ekdilam_51
• Track 11 : Syra333_57
• Track 12 : Tierra_55


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

The start number called the most often in the published annotations is 24, it was called in 12 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Applecrisp_51, Bryler_55, Cain_55, Ekdilam_51, Ellie_50, Krueger_58, November_52, PhelpsODU_54, Phrank_55, Syra333_57, Tierra_55, Tigress9_58, Unicorn_54,

Genes that have the "Most Annotated" start but do not call it:
• Pharb_51, TribleTrouble_51,

Genes that do not have the "Most Annotated" start:
• Hurricane_54, Keshu_56, Lea83_54, Pixie_53, ShedlockHolmes_55, TBond007_52,

**Summary by start number:**

Start 5:
• Found in 8 of 21 ( 38.1% ) of genes in pham
• Manual Annotations of this start: 8 of 20

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hurricane_54 (K3), Keshu_56 (K3), Lea83_54 (K3), Pharb_51 (K3), Pixie_53 (K3), ShedlockHolmes_55 (K3), TBond007_52 (K3), TribleTrouble_51 (K3),

Start 24:
• Found in 15 of 21 ( 71.4% ) of genes in pham
• Manual Annotations of this start: 12 of 20
• Called 86.7% of time when present
• Phage (with cluster) where this start called: Applecrisp_51 (K6), Bryler_55 (K6), Cain_55 (K6), Ekdilam_51 (K6), Ellie_50 (K6), Krueger_58 (K6), November_52 (K6), PhelpsODU_54 (K6), Phrank_55 (K6), Syra333_57 (K6), Tierra_55 (K6), Tigress9_58 (K6), Unicorn_54 (K6),

**Summary by clusters:**

There are 2 clusters represented in this pham: K3, K6,

Info for manual annotations of cluster K3:
•Start number 5 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K6:
•Start number 24 was manually annotated 12 times for cluster K6.


*Gene Information:*

Gene: Applecrisp_51 Start: 38300, Stop: 39112, Start Num: 24
Candidate Starts for Applecrisp_51:
(Start: 24 @38300 has 12 MA's), (26, 38315), (28, 38348), (29, 38369), (46, 38447), (57, 38540), (71, 38687), (75, 38711), (85, 38807), (86, 38828), (89, 38858), (90, 38861), (91, 38945), (92, 38978),

Gene: Bryler_55 Start: 37408, Stop: 38334, Start Num: 24
Candidate Starts for Bryler_55:
(19, 37285), (21, 37303), (Start: 24 @37408 has 12 MA's), (27, 37441), (28, 37465), (29, 37486), (31, 37498), (32, 37510), (34, 37531), (42, 37588), (44, 37594), (49, 37642), (53, 37684), (60, 37810), (62, 37816), (66, 37858), (70, 37876), (71, 37885), (76, 37918), (81, 37966), (83, 37996), (89, 38062), (90, 38065), (91, 38149), (92, 38182), (93, 38236),

Gene: Cain_55 Start: 37396, Stop: 38322, Start Num: 24
Candidate Starts for Cain_55:
(19, 37273), (21, 37291), (Start: 24 @37396 has 12 MA's), (27, 37429), (28, 37453), (29, 37474), (31, 37486), (32, 37498), (34, 37519), (42, 37576), (44, 37582), (49, 37630), (53, 37672), (60, 37798), (62, 37804), (66, 37846), (70, 37864), (71, 37873), (76, 37906), (81, 37954), (83, 37984), (89, 38050), (90, 38053), (91, 38137), (92, 38170), (93, 38224),

Gene: Ekdilam_51 Start: 38242, Stop: 39063, Start Num: 24
Candidate Starts for Ekdilam_51:
(Start: 24 @38242 has 12 MA's), (26, 38254), (28, 38287), (29, 38308), (45, 38380), (47, 38395), (51, 38425), (58, 38527), (61, 38584), (64, 38605), (78, 38722), (84, 38764), (89, 38824), (90, 38827), (91, 38911), (92, 38944), (93, 38998),

Gene: Ellie_50 Start: 37992, Stop: 38804, Start Num: 24
Candidate Starts for Ellie_50:
(Start: 24 @37992 has 12 MA's), (26, 38007), (28, 38040), (29, 38061), (46, 38139), (57, 38232), (71, 38379), (75, 38403), (85, 38499), (86, 38520), (89, 38550), (90, 38553), (91, 38637), (92, 38670),

Gene: Hurricane_54 Start: 38185, Stop: 39534, Start Num: 5
Candidate Starts for Hurricane_54:
(2, 38074), (3, 38110), (4, 38119), (Start: 5 @38185 has 8 MA's), (6, 38206), (7, 38218), (8, 38242), (9, 38263), (12, 38302), (17, 38449), (20, 38506), (22, 38548), (29, 38689), (32, 38713), (33, 38728), (48, 38806), (52, 38851), (53, 38863), (55, 38869), (65, 39022), (74, 39094), (79, 39160), (91, 39391), (92, 39424),

Gene: Keshu_56 Start: 38252, Stop: 39637, Start Num: 5
Candidate Starts for Keshu_56:
(2, 38141), (3, 38177), (4, 38186), (Start: 5 @38252 has 8 MA's), (6, 38273), (7, 38285), (8, 38309), (9, 38330), (12, 38369), (16, 38447), (20, 38534), (22, 38576), (29, 38717), (32, 38741), (33, 38756), (38, 38792), (45, 38816), (48, 38834), (52, 38879), (53, 38891), (55, 38897), (57, 38942), (59, 38996), (77, 39206), (88, 39365), (91, 39470), (92, 39503),

Gene: Krueger_58 Start: 38393, Stop: 39313, Start Num: 24
Candidate Starts for Krueger_58:
(Start: 24 @38393 has 12 MA's), (25, 38405), (27, 38420), (28, 38444), (29, 38465), (37, 38531), (49, 38576), (57, 38669), (62, 38747), (64, 38765), (68, 38819), (72, 38861), (81, 38945), (83, 38975), (89, 39041), (90, 39044), (91, 39128), (92, 39161), (93, 39215),

Gene: Lea83_54 Start: 38238, Stop: 39587, Start Num: 5
Candidate Starts for Lea83_54:
(2, 38127), (3, 38163), (4, 38172), (Start: 5 @38238 has 8 MA's), (6, 38259), (7, 38271), (8, 38295), (9, 38316), (12, 38355), (17, 38502), (20, 38559), (22, 38601), (29, 38742), (32, 38766), (33, 38781), (48, 38859), (52, 38904), (53, 38916), (55, 38922), (65, 39075), (74, 39147), (79, 39213), (91, 39444), (92, 39477),

Gene: November_52 Start: 38446, Stop: 39297, Start Num: 24
Candidate Starts for November_52:
(21, 38335), (Start: 24 @38446 has 12 MA's), (26, 38461), (28, 38494), (29, 38515), (35, 38563), (50, 38635), (54, 38671), (57, 38716), (73, 38866), (80, 38944), (82, 38956), (85, 39007), (89, 39058), (90, 39061), (91, 39145), (92, 39178), (93, 39232),

Gene: Pharb_51 Start: 36939, Stop: 38099, Start Num: 5
Candidate Starts for Pharb_51:
(2, 36828), (3, 36864), (4, 36873), (Start: 5 @36939 has 8 MA's), (6, 36960), (7, 36972), (8, 36996), (9, 37017), (11, 37041), (13, 37062), (15, 37119), (23, 37164), (Start: 24 @37206 has 12 MA's), (29, 37278), (32, 37302), (33, 37317), (52, 37446), (53, 37455), (55, 37461), (56, 37473), (57, 37506), (63, 37581), (67, 37620), (91, 37932), (92, 37965),

Gene: PhelpsODU_54 Start: 37429, Stop: 38442, Start Num: 24
Candidate Starts for PhelpsODU_54:
(Start: 24 @37429 has 12 MA's), (27, 37459), (28, 37483), (29, 37504), (31, 37516), (32, 37528), (33, 37543), (34, 37549), (42, 37621), (53, 37723), (57, 37774), (60, 37849), (62, 37855), (64, 37873), (66, 37897), (70, 37915), (71, 37924), (76, 37957), (81, 38005), (83, 38032), (89, 38188), (90, 38191), (91, 38275), (92, 38308), (93, 38362),

Gene: Phrank_55 Start: 37386, Stop: 38312, Start Num: 24

Candidate Starts for Phrank_55:
(19, 37263), (21, 37281), (Start: 24 @37386 has 12 MA's), (27, 37419), (28, 37443), (29, 37464), (31, 37476), (32, 37488), (34, 37509), (42, 37566), (44, 37572), (49, 37620), (53, 37662), (60, 37788), (62, 37794), (66, 37836), (70, 37854), (71, 37863), (76, 37896), (81, 37944), (83, 37974), (89, 38040), (90, 38043), (91, 38127), (92, 38160), (93, 38214),

Gene: Pixie_53 Start: 37717, Stop: 39072, Start Num: 5
Candidate Starts for Pixie_53:
(2, 37606), (3, 37642), (4, 37651), (Start: 5 @37717 has 8 MA's), (6, 37738), (7, 37750), (8, 37774), (9, 37795), (12, 37834), (17, 37981), (20, 38038), (22, 38080), (29, 38221), (32, 38245), (33, 38260), (48, 38344), (52, 38389), (53, 38401), (55, 38407), (65, 38560), (74, 38632), (79, 38698), (91, 38929), (92, 38962),

Gene: ShedlockHolmes_55 Start: 38242, Stop: 39591, Start Num: 5
Candidate Starts for ShedlockHolmes_55:
(2, 38131), (3, 38167), (4, 38176), (Start: 5 @38242 has 8 MA's), (6, 38263), (7, 38275), (8, 38299), (9, 38320), (12, 38359), (17, 38506), (20, 38563), (22, 38605), (29, 38746), (32, 38770), (33, 38785), (48, 38863), (52, 38908), (53, 38920), (55, 38926), (65, 39079), (74, 39151), (79, 39217), (91, 39448), (92, 39481),

Gene: Syra333_57 Start: 38303, Stop: 39322, Start Num: 24
Candidate Starts for Syra333_57:
(19, 38186), (Start: 24 @38303 has 12 MA's), (25, 38315), (27, 38330), (28, 38354), (29, 38375), (37, 38441), (39, 38462), (40, 38465), (41, 38489), (49, 38585), (57, 38678), (64, 38774), (68, 38828), (72, 38870), (81, 38954), (83, 38984), (89, 39050), (90, 39053), (91, 39137), (92, 39170), (93, 39224),

Gene: TBond007_52 Start: 37716, Stop: 39071, Start Num: 5
Candidate Starts for TBond007_52:
(2, 37605), (3, 37641), (4, 37650), (Start: 5 @37716 has 8 MA's), (6, 37737), (7, 37749), (8, 37773), (9, 37794), (12, 37833), (17, 37980), (20, 38037), (22, 38079), (29, 38220), (32, 38244), (33, 38259), (48, 38343), (52, 38388), (53, 38400), (55, 38406), (65, 38559), (74, 38631), (79, 38697), (91, 38928), (92, 38961),

Gene: Tierra_55 Start: 38197, Stop: 39123, Start Num: 24
Candidate Starts for Tierra_55:
(21, 38092), (Start: 24 @38197 has 12 MA's), (27, 38230), (28, 38254), (29, 38275), (31, 38287), (32, 38299), (34, 38320), (42, 38377), (44, 38383), (49, 38431), (53, 38473), (60, 38599), (62, 38605), (66, 38647), (70, 38665), (71, 38674), (76, 38707), (81, 38755), (83, 38785), (89, 38851), (90, 38854), (91, 38938), (92, 38971), (93, 39025),

Gene: Tigress9_58 Start: 38393, Stop: 39313, Start Num: 24
Candidate Starts for Tigress9_58:
(Start: 24 @38393 has 12 MA's), (25, 38405), (27, 38420), (28, 38444), (29, 38465), (37, 38531), (49, 38576), (57, 38669), (62, 38747), (64, 38765), (68, 38819), (72, 38861), (81, 38945), (83, 38975), (89, 39041), (90, 39044), (91, 39128), (92, 39161), (93, 39215),

Gene: TribleTrouble_51 Start: 37598, Stop: 38950, Start Num: 5
Candidate Starts for TribleTrouble_51:
(1, 37460), (2, 37487), (3, 37523), (4, 37532), (Start: 5 @37598 has 8 MA's), (7, 37631), (8, 37655), (10, 37688), (13, 37721), (14, 37754), (18, 37877), (20, 37946), (23, 38015), (Start: 24 @38057 has 12 MA's), (30, 38126), (32, 38141), (33, 38156), (34, 38162), (36, 38174), (38, 38192), (43, 38198), (52, 38285), (53, 38297), (55, 38303), (69, 38492), (74, 38525), (87, 38657), (89, 38693), (91, 38783), (92, 38816),

Gene: Unicorn_54 Start: 37429, Stop: 38442, Start Num: 24
Candidate Starts for Unicorn_54:
(Start: 24 @37429 has 12 MA's), (27, 37459), (28, 37483), (29, 37504), (31, 37516), (32, 37528), (33, 37543), (34, 37549), (42, 37621), (53, 37723), (57, 37774), (60, 37849), (62, 37855), (64, 37873), (66, 37897), (70, 37915), (71, 37924), (76, 37957), (81, 38005), (83, 38032), (89, 38188), (90, 38191), (91, 38275), (92, 38308), (93, 38362),