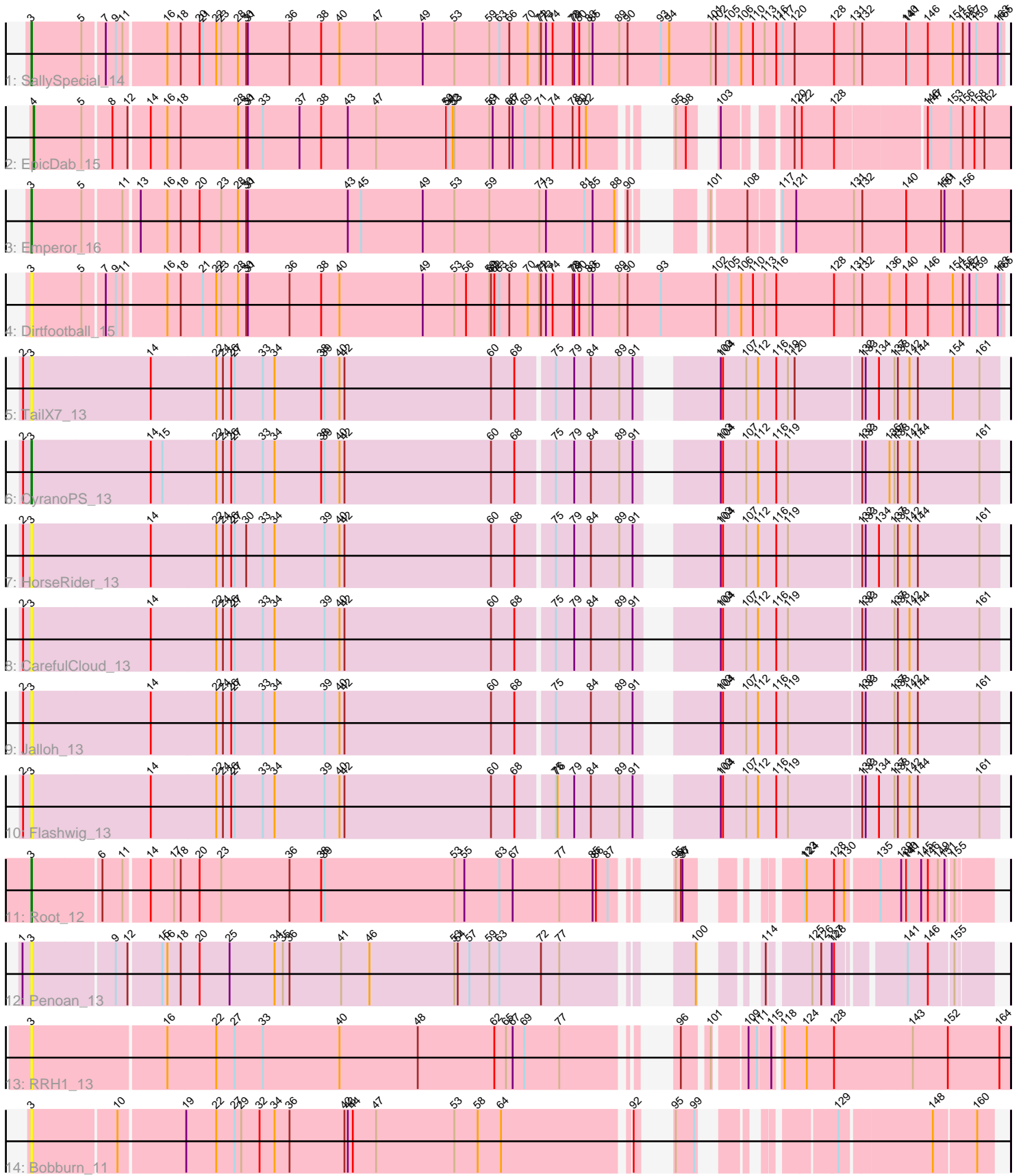


Pham 300451



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 300451 Report

This analysis was run 06/08/26 on database version 649.

Pham number 300451 has 14 members, 9 are drafts.

Phages represented in each track:

- Track 1 : SallySpecial_14
- Track 2 : EpicDab_15
- Track 3 : Emperor_16
- Track 4 : Dirtfootball_15
- Track 5 : TailX7_13
- Track 6 : CyranoPS_13
- Track 7 : HorseRider_13
- Track 8 : CarefulCloud_13
- Track 9 : Jalloh_13
- Track 10 : Flashwig_13
- Track 11 : Root_12
- Track 12 : Penoan_13
- Track 13 : RRH1_13
- Track 14 : Bobburn_11

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

The start number called the most often in the published annotations is 3, it was called in 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bobburn_11, CarefulCloud_13, CyranoPS_13, Dirtfootball_15, Emperor_16, Flashwig_13, HorseRider_13, Jalloh_13, Penoan_13, RRH1_13, Root_12, SallySpecial_14, TailX7_13,

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

-

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

- EpicDab_15,

Summary by start number:

Start 3:

- Found in 13 of 14 (92.9%) of genes in pham
- Manual Annotations of this start: 4 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobburn_11 (singleton), CarefulCloud_13 (ER), CyranoPS_13 (ER), Dirtfootball_15 (DM), Emperor_16 (DM), Flashwig_13 (ER), HorseRider_13 (ER), Jalloh_13 (ER), Penoan_13 (UNK), RRH1_13 (singleton), Root_12 (JC), SallySpecial_14 (DM), TailX7_13 (ER),

Start 4:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EpicDab_15 (DM),

Summary by clusters:

There are 5 clusters represented in this pham: JC, UNK, singleton, DM, ER,

Info for manual annotations of cluster DM:

- Start number 3 was manually annotated 2 times for cluster DM.
- Start number 4 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster ER:

- Start number 3 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster JC:

- Start number 3 was manually annotated 1 time for cluster JC.

Gene Information:

Gene: Bobburn_11 Start: 6933, Stop: 8420, Start Num: 3

Candidate Starts for Bobburn_11:

(Start: 3 @6933 has 4 MA's), (10, 7074), (19, 7188), (22, 7242), (27, 7275), (29, 7287), (32, 7320), (34, 7347), (36, 7374), (42, 7473), (43, 7479), (44, 7488), (47, 7530), (53, 7671), (58, 7713), (64, 7755), (92, 7968), (95, 7983), (99, 8013), (129, 8169), (148, 8319), (160, 8391),

Gene: CarefulCloud_13 Start: 7554, Stop: 9215, Start Num: 3

Candidate Starts for CarefulCloud_13:

(2, 7539), (Start: 3 @7554 has 4 MA's), (14, 7767), (22, 7884), (24, 7896), (26, 7911), (27, 7917), (33, 7968), (34, 7989), (39, 8079), (40, 8106), (42, 8115), (60, 8379), (68, 8421), (75, 8484), (79, 8517), (84, 8547), (89, 8598), (91, 8622), (103, 8724), (104, 8727), (107, 8769), (112, 8790), (116, 8823), (119, 8844), (132, 8970), (133, 8976), (137, 9027), (138, 9033), (142, 9054), (144, 9069), (161, 9180),

Gene: CyranoPS_13 Start: 7551, Stop: 9212, Start Num: 3

Candidate Starts for CyranoPS_13:

(2, 7536), (Start: 3 @7551 has 4 MA's), (14, 7764), (15, 7785), (22, 7881), (24, 7893), (26, 7908), (27, 7914), (33, 7965), (34, 7986), (38, 8070), (39, 8076), (40, 8103), (42, 8112), (60, 8376), (68, 8418), (75, 8481), (79, 8514), (84, 8544), (89, 8595), (91, 8619), (103, 8721), (104, 8724), (107, 8766), (112, 8787), (116, 8820), (119, 8841), (132, 8967), (133, 8973), (136, 9015), (137, 9024), (138, 9030), (142, 9051), (144, 9066), (161, 9177),

Gene: Dirtfootball_15 Start: 8313, Stop: 10028, Start Num: 3

Candidate Starts for Dirtfootball_15:

(Start: 3 @8313 has 4 MA's), (5, 8400), (7, 8436), (9, 8451), (11, 8463), (16, 8535), (18, 8559), (21, 8598), (22, 8622), (23, 8631), (28, 8661), (30, 8676), (31, 8679), (36, 8754), (38, 8811), (40, 8844), (49, 8994), (53, 9051), (56, 9072), (59, 9114), (60, 9117), (62, 9123), (63, 9132), (66, 9150), (70, 9183), (71, 9204), (72, 9207), (73, 9216), (74, 9228), (78, 9264), (79, 9267), (80, 9276), (83, 9294), (85, 9300), (89, 9348), (90, 9363), (93, 9423), (102, 9522), (105, 9543), (106, 9567), (110, 9588), (113, 9609), (116, 9630), (128, 9732), (131, 9768), (132, 9783), (136, 9828), (140, 9858), (146, 9891), (154, 9936), (156, 9954), (157, 9966), (159, 9978), (163, 10017), (165, 10023),

Gene: Emperor_16 Start: 9361, Stop: 10944, Start Num: 3

Candidate Starts for Emperor_16:

(Start: 3 @9361 has 4 MA's), (5, 9448), (11, 9511), (13, 9535), (16, 9583), (18, 9607), (20, 9640), (23, 9679), (28, 9709), (30, 9724), (31, 9727), (43, 9907), (45, 9931), (49, 10042), (53, 10099), (59, 10162), (71, 10252), (73, 10264), (81, 10333), (85, 10348), (88, 10387), (90, 10396), (101, 10450), (108, 10504), (117, 10549), (121, 10573), (131, 10675), (132, 10690), (140, 10765), (150, 10819), (151, 10825), (156, 10858),

Gene: EpicDab_15 Start: 9326, Stop: 10867, Start Num: 4

Candidate Starts for EpicDab_15:

(Start: 4 @9326 has 1 MA's), (5, 9410), (8, 9458), (12, 9482), (14, 9515), (16, 9545), (18, 9569), (28, 9671), (30, 9686), (31, 9689), (33, 9716), (37, 9782), (38, 9821), (43, 9869), (47, 9920), (50, 10046), (51, 10049), (52, 10058), (53, 10061), (59, 10124), (61, 10130), (66, 10160), (67, 10166), (69, 10187), (71, 10214), (74, 10238), (78, 10274), (80, 10286), (82, 10298), (95, 10373), (98, 10391), (103, 10412), (120, 10508), (122, 10520), (128, 10577), (146, 10721), (147, 10727), (153, 10760), (156, 10781), (158, 10802), (162, 10820),

Gene: Flashwig_13 Start: 7553, Stop: 9214, Start Num: 3

Candidate Starts for Flashwig_13:

(2, 7538), (Start: 3 @7553 has 4 MA's), (14, 7766), (22, 7883), (24, 7895), (26, 7910), (27, 7916), (33, 7967), (34, 7988), (39, 8078), (40, 8105), (42, 8114), (60, 8378), (68, 8420), (75, 8483), (76, 8486), (79, 8516), (84, 8546), (89, 8597), (91, 8621), (103, 8723), (104, 8726), (107, 8768), (112, 8789), (116, 8822), (119, 8843), (132, 8969), (133, 8975), (134, 8999), (137, 9026), (138, 9032), (142, 9053), (144, 9068), (161, 9179),

Gene: HorseRider_13 Start: 7553, Stop: 9214, Start Num: 3

Candidate Starts for HorseRider_13:

(2, 7538), (Start: 3 @7553 has 4 MA's), (14, 7766), (22, 7883), (24, 7895), (26, 7910), (27, 7916), (30, 7937), (33, 7967), (34, 7988), (39, 8078), (40, 8105), (42, 8114), (60, 8378), (68, 8420), (75, 8483), (79, 8516), (84, 8546), (89, 8597), (91, 8621), (103, 8723), (104, 8726), (107, 8768), (112, 8789), (116, 8822), (119, 8843), (132, 8969), (133, 8975), (134, 8999), (137, 9026), (138, 9032), (142, 9053), (144, 9068), (161, 9179),

Gene: Jalloh_13 Start: 7561, Stop: 9222, Start Num: 3

Candidate Starts for Jalloh_13:

(2, 7546), (Start: 3 @7561 has 4 MA's), (14, 7774), (22, 7891), (24, 7903), (26, 7918), (27, 7924), (33, 7975), (34, 7996), (39, 8086), (40, 8113), (42, 8122), (60, 8386), (68, 8428), (75, 8491), (84, 8554), (89, 8605), (91, 8629), (103, 8731), (104, 8734), (107, 8776), (112, 8797), (116, 8830), (119, 8851), (132, 8977), (133, 8983), (137, 9034), (138, 9040), (142, 9061), (144, 9076), (161, 9187),

Gene: Penoan_13 Start: 7682, Stop: 9142, Start Num: 3

Candidate Starts for Penoan_13:

(1, 7667), (Start: 3 @7682 has 4 MA's), (9, 7820), (12, 7841), (15, 7895), (16, 7904), (18, 7928), (20, 7961), (25, 8015), (34, 8096), (35, 8111), (36, 8123), (41, 8216), (46, 8267), (53, 8420), (54, 8426), (57, 8447), (59, 8483), (63, 8501), (72, 8576), (77, 8609), (100, 8765), (114, 8813), (125, 8876), (126, 8891), (127, 8906), (128, 8909), (141, 9008), (146, 9041), (155, 9083),

Gene: RRH1_13 Start: 8442, Stop: 10040, Start Num: 3

Candidate Starts for RRH1_13:

(Start: 3 @8442 has 4 MA's), (16, 8676), (22, 8763), (27, 8796), (33, 8847), (40, 8985), (48, 9126), (62, 9264), (65, 9285), (67, 9297), (69, 9318), (77, 9381), (96, 9510), (101, 9546), (109, 9594), (111, 9609), (115, 9630), (118, 9642), (124, 9681), (128, 9729), (143, 9864), (152, 9927), (164, 10020),

Gene: Root_12 Start: 7731, Stop: 9218, Start Num: 3

Candidate Starts for Root_12:

(Start: 3 @7731 has 4 MA's), (6, 7848), (11, 7881), (14, 7923), (17, 7965), (18, 7977), (20, 8010), (23, 8049), (36, 8172), (38, 8229), (39, 8235), (53, 8469), (55, 8487), (63, 8550), (67, 8574), (77, 8658), (85, 8718), (86, 8724), (87, 8745), (95, 8781), (96, 8790), (97, 8793), (123, 8913), (124, 8916), (128, 8964), (130, 8982), (135, 9036), (139, 9072), (140, 9081), (141, 9084), (145, 9105), (146, 9117), (149, 9135), (151, 9147), (155, 9159),

Gene: SallySpecial_14 Start: 8310, Stop: 10028, Start Num: 3

Candidate Starts for SallySpecial_14:

(Start: 3 @8310 has 4 MA's), (5, 8397), (7, 8433), (9, 8448), (11, 8460), (16, 8532), (18, 8556), (20, 8589), (21, 8595), (22, 8619), (23, 8628), (28, 8658), (30, 8673), (31, 8676), (36, 8751), (38, 8808), (40, 8841), (47, 8907), (49, 8991), (53, 9048), (59, 9111), (63, 9129), (66, 9147), (70, 9180), (71, 9201), (72, 9204), (73, 9213), (74, 9225), (78, 9261), (79, 9264), (80, 9273), (83, 9291), (85, 9297), (89, 9345), (90, 9360), (93, 9420), (94, 9435), (101, 9510), (102, 9519), (105, 9540), (106, 9564), (110, 9585), (113, 9606), (116, 9627), (117, 9639), (120, 9660), (128, 9729), (131, 9765), (132, 9780), (140, 9855), (141, 9858), (146, 9891), (154, 9936), (156, 9954), (157, 9966), (159, 9978), (163, 10017), (165, 10023),

Gene: TailX7_13 Start: 7550, Stop: 9211, Start Num: 3

Candidate Starts for TailX7_13:

(2, 7535), (Start: 3 @7550 has 4 MA's), (14, 7763), (22, 7880), (24, 7892), (26, 7907), (27, 7913), (33, 7964), (34, 7985), (38, 8069), (39, 8075), (40, 8102), (42, 8111), (60, 8375), (68, 8417), (75, 8480), (79, 8513), (84, 8543), (89, 8594), (91, 8618), (103, 8720), (104, 8723), (107, 8765), (112, 8786), (116, 8819), (119, 8840), (120, 8852), (132, 8966), (133, 8972), (134, 8996), (137, 9023), (138, 9029), (142, 9050), (144, 9065), (154, 9128), (161, 9176),