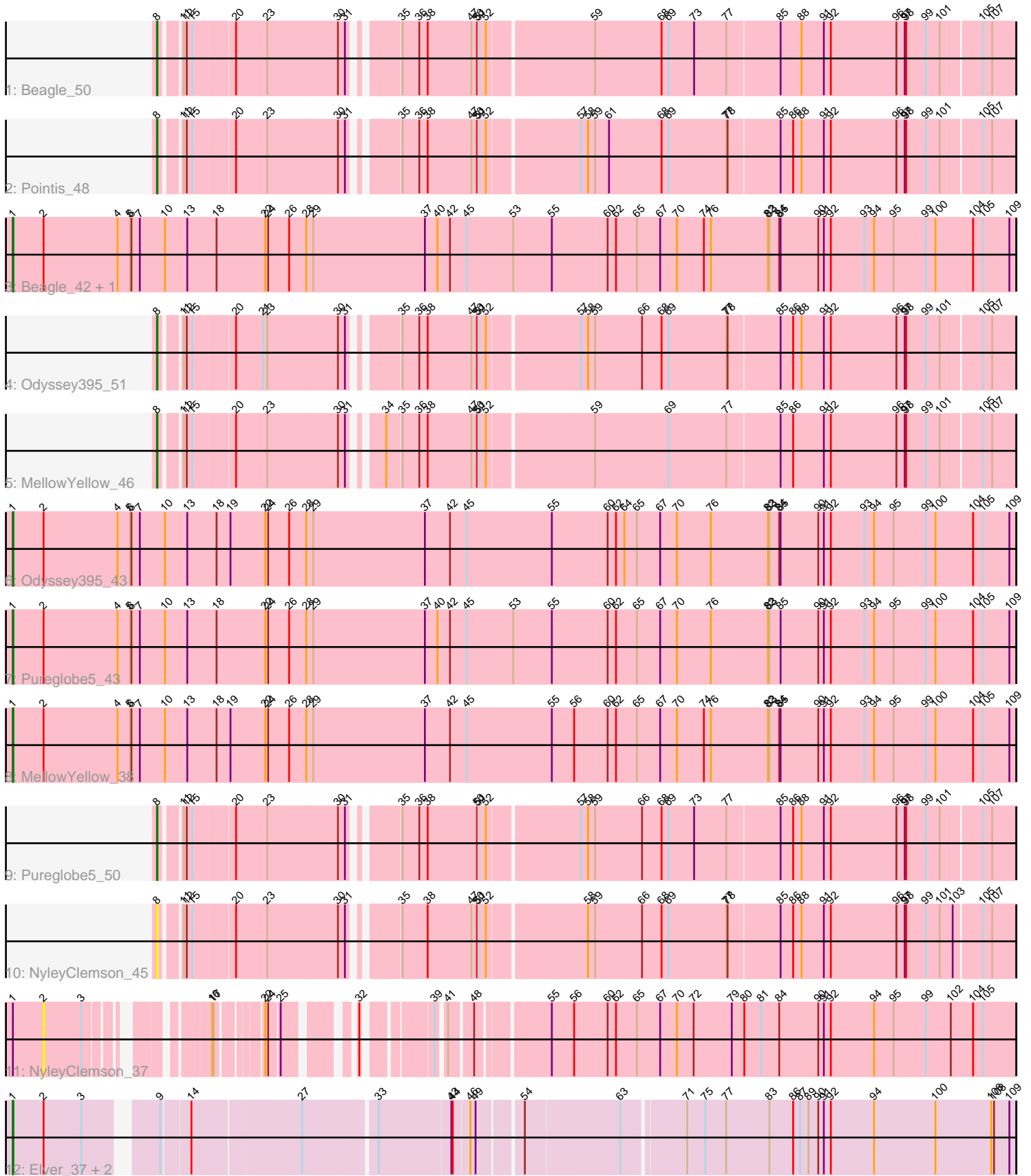


# Pham 184090



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 184090 Report

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

Pham number 184090 has 15 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Beagle\_50
- Track 2 : Pointis\_48
- Track 3 : Beagle\_42, Pointis\_40
- Track 4 : Odyssey395\_51
- Track 5 : MellowYellow\_46
- Track 6 : Odyssey395\_43
- Track 7 : Pureglobe5\_43
- Track 8 : MellowYellow\_38
- Track 9 : Pureglobe5\_50
- Track 10 : NyleyClemson\_45
- Track 11 : NyleyClemson\_37
- Track 12 : Elver\_37, Qui\_38, Paella\_38

### ***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 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle\_42, Elver\_37, MellowYellow\_38, Odyssey395\_43, Paella\_38, Pointis\_40, Pureglobe5\_43, Qui\_38,

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

- NyleyClemson\_37,

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

- Beagle\_50, MellowYellow\_46, NyleyClemson\_45, Odyssey395\_51, Pointis\_48, Pureglobe5\_50,

### **Summary by start number:**

Start 1:

- Found in 9 of 15 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 7 of 12

- Called 88.9% of time when present
- Phage (with cluster) where this start called: Beagle\_42 (AP2), Elver\_37 (FK), MellowYellow\_38 (AP2), Odyssey395\_43 (AP2), Paella\_38 (FK), Pointis\_40 (AP2), Pureglobe5\_43 (AP2), Qui\_38 (FK),

#### Start 2:

- Found in 9 of 15 ( 60.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: NyleyClemson\_37 (AP2),

#### Start 8:

- Found in 6 of 15 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_50 (AP2), MellowYellow\_46 (AP2), NyleyClemson\_45 (AP2), Odyssey395\_51 (AP2), Pointis\_48 (AP2), Pureglobe5\_50 (AP2),

### Summary by clusters:

There are 2 clusters represented in this pham: AP2, FK,

Info for manual annotations of cluster AP2:

- Start number 1 was manually annotated 5 times for cluster AP2.
- Start number 8 was manually annotated 5 times for cluster AP2.

Info for manual annotations of cluster FK:

- Start number 1 was manually annotated 2 times for cluster FK.

### Gene Information:

Gene: Beagle\_50 Start: 35979, Stop: 37676, Start Num: 8

Candidate Starts for Beagle\_50:

(Start: 8 @35979 has 5 MA's), (11, 36015), (12, 36021), (15, 36033), (20, 36117), (23, 36183), (30, 36324), (31, 36339), (35, 36417), (36, 36453), (38, 36471), (47, 36561), (50, 36573), (51, 36576), (52, 36591), (59, 36795), (68, 36936), (69, 36951), (73, 37005), (77, 37074), (85, 37185), (88, 37230), (91, 37278), (92, 37293), (96, 37434), (97, 37452), (98, 37455), (99, 37497), (101, 37527), (105, 37608), (107, 37626),

Gene: Beagle\_42 Start: 30066, Stop: 32198, Start Num: 1

Candidate Starts for Beagle\_42:

(Start: 1 @30066 has 7 MA's), (2, 30132), (4, 30291), (5, 30318), (6, 30321), (7, 30339), (10, 30393), (13, 30441), (18, 30504), (22, 30609), (24, 30615), (26, 30660), (28, 30696), (29, 30711), (37, 30951), (40, 30978), (42, 31005), (45, 31041), (53, 31140), (55, 31221), (60, 31341), (62, 31359), (65, 31401), (67, 31449), (70, 31485), (74, 31539), (76, 31554), (82, 31674), (83, 31677), (84, 31698), (85, 31701), (90, 31782), (91, 31794), (92, 31809), (93, 31878), (94, 31899), (95, 31941), (99, 32007), (100, 32028), (104, 32109), (105, 32130), (109, 32187),

Gene: Elver\_37 Start: 26848, Stop: 28818, Start Num: 1

Candidate Starts for Elver\_37:

(Start: 1 @26848 has 7 MA's), (2, 26914), (3, 26995), (9, 27121), (14, 27175), (27, 27388), (33, 27535), (43, 27682), (44, 27685), (46, 27718), (49, 27727), (54, 27808), (63, 28000), (71, 28123), (75, 28159), (77, 28201), (83, 28294), (86, 28345), (87, 28360), (89, 28378), (90, 28399), (91, 28411), (92, 28426), (94, 28519), (100, 28648), (106, 28768), (108, 28774), (109, 28807),

Gene: MellowYellow\_46 Start: 34714, Stop: 36411, Start Num: 8

Candidate Starts for MellowYellow\_46:

(Start: 8 @34714 has 5 MA's), (11, 34750), (12, 34756), (15, 34768), (20, 34852), (23, 34918), (30, 35059), (31, 35074), (34, 35122), (35, 35152), (36, 35188), (38, 35206), (47, 35296), (50, 35308), (51, 35311), (52, 35326), (59, 35530), (69, 35686), (77, 35809), (85, 35920), (86, 35947), (91, 36013), (92, 36028), (96, 36169), (97, 36187), (98, 36190), (99, 36232), (101, 36262), (105, 36343), (107, 36361),

Gene: MellowYellow\_38 Start: 28801, Stop: 30933, Start Num: 1

Candidate Starts for MellowYellow\_38:

(Start: 1 @28801 has 7 MA's), (2, 28867), (4, 29026), (5, 29053), (6, 29056), (7, 29074), (10, 29128), (13, 29176), (18, 29239), (19, 29269), (22, 29344), (24, 29350), (26, 29395), (28, 29431), (29, 29446), (37, 29686), (42, 29740), (45, 29776), (55, 29956), (56, 30004), (60, 30076), (62, 30094), (65, 30136), (67, 30184), (70, 30220), (74, 30274), (76, 30289), (82, 30409), (83, 30412), (84, 30433), (85, 30436), (90, 30517), (91, 30529), (92, 30544), (93, 30613), (94, 30634), (95, 30676), (99, 30742), (100, 30763), (104, 30844), (105, 30865), (109, 30922),

Gene: NyleyClemson\_45 Start: 34329, Stop: 36026, Start Num: 8

Candidate Starts for NyleyClemson\_45:

(Start: 8 @34329 has 5 MA's), (11, 34365), (12, 34371), (15, 34383), (20, 34467), (23, 34533), (30, 34674), (31, 34689), (35, 34767), (38, 34821), (47, 34911), (50, 34923), (51, 34926), (52, 34941), (58, 35130), (59, 35145), (66, 35244), (68, 35286), (69, 35301), (77, 35424), (78, 35427), (85, 35535), (86, 35562), (88, 35580), (91, 35628), (92, 35643), (96, 35784), (97, 35802), (98, 35805), (99, 35847), (101, 35877), (103, 35901), (105, 35958), (107, 35976),

Gene: NyleyClemson\_37 Start: 28800, Stop: 30548, Start Num: 2

Candidate Starts for NyleyClemson\_37:

(Start: 1 @28734 has 7 MA's), (2, 28800), (3, 28881), (16, 29061), (17, 29064), (22, 29139), (24, 29145), (25, 29163), (32, 29268), (39, 29382), (41, 29397), (48, 29439), (55, 29571), (56, 29619), (60, 29691), (62, 29709), (65, 29751), (67, 29799), (70, 29835), (72, 29871), (79, 29946), (80, 29973), (81, 30009), (84, 30048), (90, 30132), (91, 30144), (92, 30159), (94, 30249), (95, 30291), (99, 30357), (102, 30411), (104, 30459), (105, 30480),

Gene: Odyssey395\_51 Start: 35998, Stop: 37695, Start Num: 8

Candidate Starts for Odyssey395\_51:

(Start: 8 @35998 has 5 MA's), (11, 36034), (12, 36040), (15, 36052), (20, 36136), (21, 36193), (23, 36202), (30, 36343), (31, 36358), (35, 36436), (36, 36472), (38, 36490), (47, 36580), (50, 36592), (51, 36595), (52, 36610), (57, 36784), (58, 36799), (59, 36814), (66, 36913), (68, 36955), (69, 36970), (77, 37093), (78, 37096), (85, 37204), (86, 37231), (88, 37249), (91, 37297), (92, 37312), (96, 37453), (97, 37471), (98, 37474), (99, 37516), (101, 37546), (105, 37627), (107, 37645),

Gene: Odyssey395\_43 Start: 30085, Stop: 32217, Start Num: 1

Candidate Starts for Odyssey395\_43:

(Start: 1 @30085 has 7 MA's), (2, 30151), (4, 30310), (5, 30337), (6, 30340), (7, 30358), (10, 30412), (13, 30460), (18, 30523), (19, 30553), (22, 30628), (24, 30634), (26, 30679), (28, 30715), (29, 30730), (37, 30970), (42, 31024), (45, 31060), (55, 31240), (60, 31360), (62, 31378), (64, 31393), (65, 31420), (67, 31468), (70, 31504), (76, 31573), (82, 31693), (83, 31696), (84, 31717), (85, 31720), (90, 31801), (91, 31813), (92, 31828), (93, 31897), (94, 31918), (95, 31960), (99, 32026), (100, 32047), (104, 32128), (105, 32149), (109, 32206),

Gene: Paella\_38 Start: 26850, Stop: 28820, Start Num: 1

Candidate Starts for Paella\_38:

(Start: 1 @26850 has 7 MA's), (2, 26916), (3, 26997), (9, 27123), (14, 27177), (27, 27390), (33, 27537), (43, 27684), (44, 27687), (46, 27720), (49, 27729), (54, 27810), (63, 28002), (71, 28125), (75, 28161), (77, 28203), (83, 28296), (86, 28347), (87, 28362), (89, 28380), (90, 28401), (91, 28413), (92, 28428), (94, 28521), (100, 28650), (106, 28770), (108, 28776), (109, 28809),

Gene: Pointis\_48 Start: 35996, Stop: 37693, Start Num: 8

Candidate Starts for Pointis\_48:

(Start: 8 @35996 has 5 MA's), (11, 36032), (12, 36038), (15, 36050), (20, 36134), (23, 36200), (30, 36341), (31, 36356), (35, 36434), (36, 36470), (38, 36488), (47, 36578), (50, 36590), (51, 36593), (52, 36608), (57, 36782), (58, 36797), (59, 36812), (61, 36842), (68, 36953), (69, 36968), (77, 37091), (78, 37094), (85, 37202), (86, 37229), (88, 37247), (91, 37295), (92, 37310), (96, 37451), (97, 37469), (98, 37472), (99, 37514), (101, 37544), (105, 37625), (107, 37643),

Gene: Pointis\_40 Start: 30083, Stop: 32215, Start Num: 1

Candidate Starts for Pointis\_40:

(Start: 1 @30083 has 7 MA's), (2, 30149), (4, 30308), (5, 30335), (6, 30338), (7, 30356), (10, 30410), (13, 30458), (18, 30521), (22, 30626), (24, 30632), (26, 30677), (28, 30713), (29, 30728), (37, 30968), (40, 30995), (42, 31022), (45, 31058), (53, 31157), (55, 31238), (60, 31358), (62, 31376), (65, 31418), (67, 31466), (70, 31502), (74, 31556), (76, 31571), (82, 31691), (83, 31694), (84, 31715), (85, 31718), (90, 31799), (91, 31811), (92, 31826), (93, 31895), (94, 31916), (95, 31958), (99, 32024), (100, 32045), (104, 32126), (105, 32147), (109, 32204),

Gene: Pureglobe5\_43 Start: 30266, Stop: 32398, Start Num: 1

Candidate Starts for Pureglobe5\_43:

(Start: 1 @30266 has 7 MA's), (2, 30332), (4, 30491), (5, 30518), (6, 30521), (7, 30539), (10, 30593), (13, 30641), (18, 30704), (22, 30809), (24, 30815), (26, 30860), (28, 30896), (29, 30911), (37, 31151), (40, 31178), (42, 31205), (45, 31241), (53, 31340), (55, 31421), (60, 31541), (62, 31559), (65, 31601), (67, 31649), (70, 31685), (76, 31754), (82, 31874), (83, 31877), (85, 31901), (90, 31982), (91, 31994), (92, 32009), (93, 32078), (94, 32099), (95, 32141), (99, 32207), (100, 32228), (104, 32309), (105, 32330), (109, 32387),

Gene: Pureglobe5\_50 Start: 36179, Stop: 37876, Start Num: 8

Candidate Starts for Pureglobe5\_50:

(Start: 8 @36179 has 5 MA's), (11, 36215), (12, 36221), (15, 36233), (20, 36317), (23, 36383), (30, 36524), (31, 36539), (35, 36617), (36, 36653), (38, 36671), (50, 36773), (51, 36776), (52, 36791), (57, 36965), (58, 36980), (59, 36995), (66, 37094), (68, 37136), (69, 37151), (73, 37205), (77, 37274), (85, 37385), (86, 37412), (88, 37430), (91, 37478), (92, 37493), (96, 37634), (97, 37652), (98, 37655), (99, 37697), (101, 37727), (105, 37808), (107, 37826),

Gene: Qui\_38 Start: 26850, Stop: 28820, Start Num: 1

Candidate Starts for Qui\_38:

(Start: 1 @26850 has 7 MA's), (2, 26916), (3, 26997), (9, 27123), (14, 27177), (27, 27390), (33, 27537), (43, 27684), (44, 27687), (46, 27720), (49, 27729), (54, 27810), (63, 28002), (71, 28125), (75, 28161), (77, 28203), (83, 28296), (86, 28347), (87, 28362), (89, 28380), (90, 28401), (91, 28413), (92, 28428), (94, 28521), (100, 28650), (106, 28770), (108, 28776), (109, 28809),