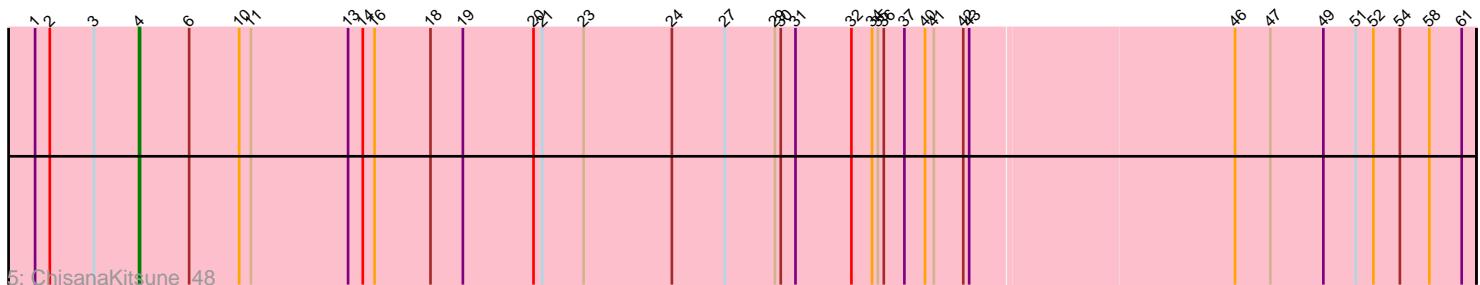
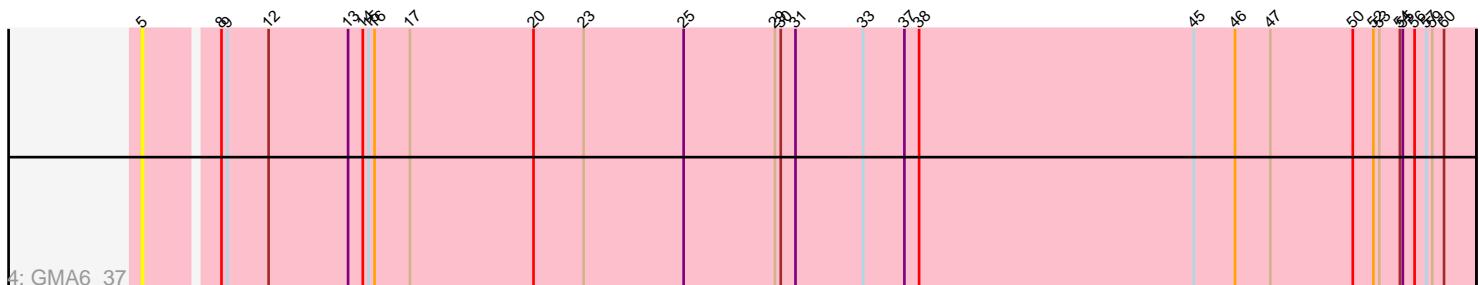
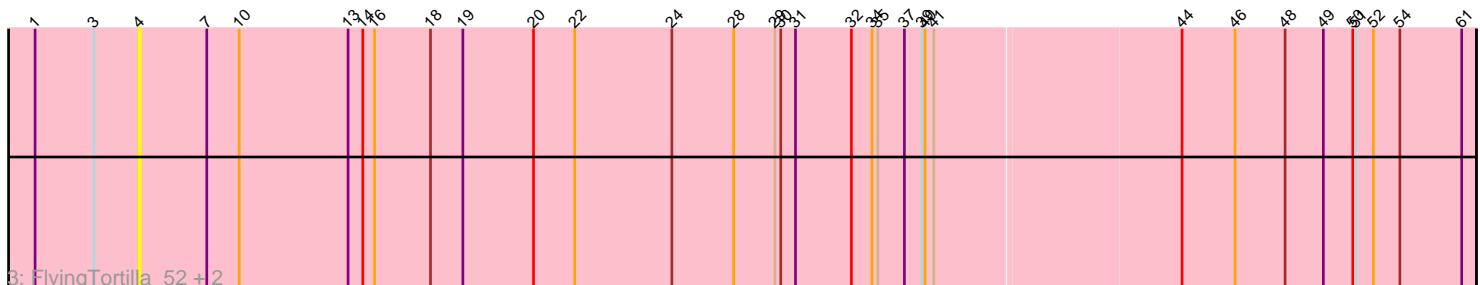
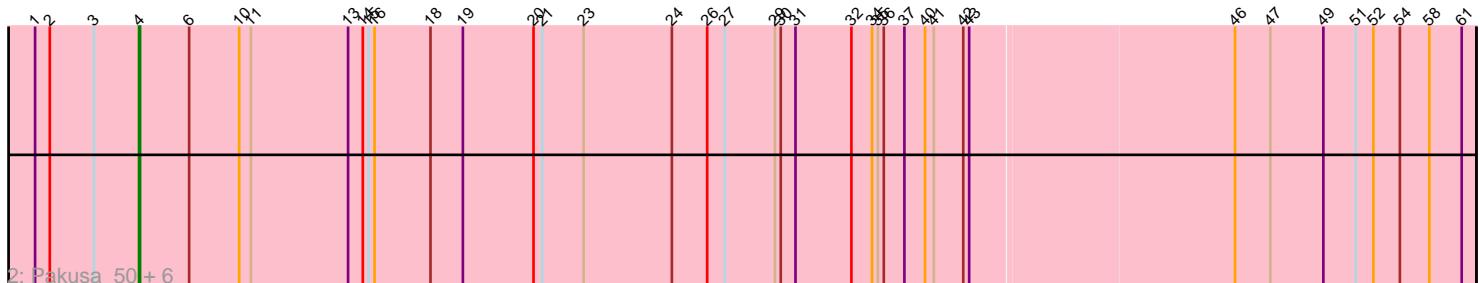
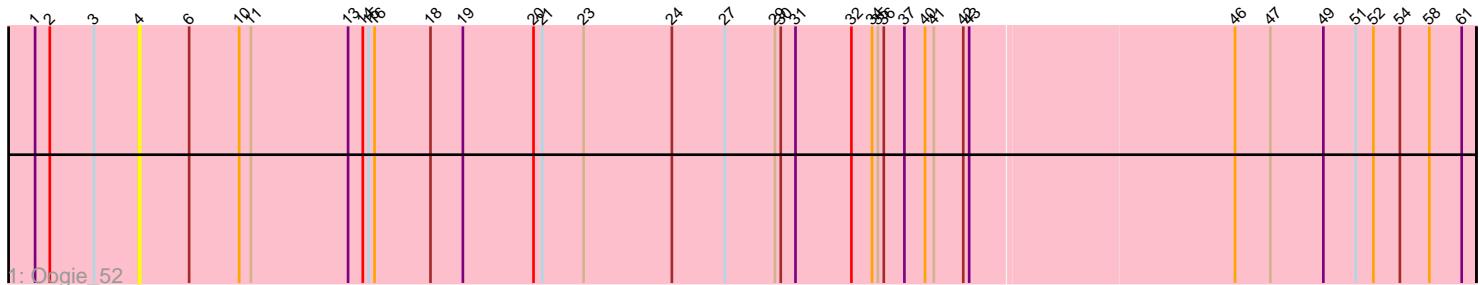


Pham 87430



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 87430 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87430 has 13 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Oogie\_52
- Track 2 : Pakusa\_50, Schomber\_51, Chidiebere\_52, Hanem\_52, Aloki\_50, Gray\_52, Kabocha\_53
- Track 3 : FlyingTortilla\_52, UBSmoodge\_54, ScarletRaider\_51
- Track 4 : GMA6\_37
- Track 5 : ChisanaKitsune\_48

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

The start number called the most often in the published annotations is 4, it was called in 6 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aloki\_50, Chidiebere\_52, ChisanaKitsune\_48, FlyingTortilla\_52, Gray\_52, Hanem\_52, Kabocha\_53, Oogie\_52, Pakusa\_50, ScarletRaider\_51, Schomber\_51, UBSmoodge\_54,

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

- 

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

- GMA6\_37,

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

Start 4:

- Found in 12 of 13 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 6 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloki\_50 (DQ), Chidiebere\_52 (DQ), ChisanaKitsune\_48 (DQ), FlyingTortilla\_52 (DQ), Gray\_52 (DQ), Hanem\_52 (DQ), Kabocha\_53 (DQ), Oogie\_52 (DQ), Pakusa\_50 (DQ), ScarletRaider\_51 (DQ), Schomber\_51 (DQ), UBSmoodge\_54 (DQ),

### Start 5:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_37 (DQ),

### Summary by clusters:

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- Start number 4 was manually annotated 6 times for cluster DQ.

### Gene Information:

Gene: Aloki\_50 Start: 39571, Stop: 40923, Start Num: 4

Candidate Starts for Aloki\_50:

(1, 39466), (2, 39481), (3, 39526), (Start: 4 @39571 has 6 MA's), (6, 39622), (10, 39673), (11, 39685), (13, 39784), (14, 39799), (15, 39805), (16, 39811), (18, 39868), (19, 39901), (20, 39973), (21, 39982), (23, 40024), (24, 40114), (26, 40150), (27, 40168), (29, 40219), (30, 40225), (31, 40240), (32, 40297), (34, 40318), (35, 40324), (36, 40330), (37, 40351), (40, 40372), (41, 40381), (42, 40411), (43, 40417), (46, 40678), (47, 40714), (49, 40768), (51, 40801), (52, 40819), (54, 40846), (58, 40876), (61, 40909),

Gene: Chidiebere\_52 Start: 39571, Stop: 40923, Start Num: 4

Candidate Starts for Chidiebere\_52:

(1, 39466), (2, 39481), (3, 39526), (Start: 4 @39571 has 6 MA's), (6, 39622), (10, 39673), (11, 39685), (13, 39784), (14, 39799), (15, 39805), (16, 39811), (18, 39868), (19, 39901), (20, 39973), (21, 39982), (23, 40024), (24, 40114), (26, 40150), (27, 40168), (29, 40219), (30, 40225), (31, 40240), (32, 40297), (34, 40318), (35, 40324), (36, 40330), (37, 40351), (40, 40372), (41, 40381), (42, 40411), (43, 40417), (46, 40678), (47, 40714), (49, 40768), (51, 40801), (52, 40819), (54, 40846), (58, 40876), (61, 40909),

Gene: ChisanaKitsune\_48 Start: 38362, Stop: 39714, Start Num: 4

Candidate Starts for ChisanaKitsune\_48:

(1, 38257), (2, 38272), (3, 38317), (Start: 4 @38362 has 6 MA's), (6, 38413), (10, 38464), (11, 38476), (13, 38575), (14, 38590), (16, 38602), (18, 38659), (19, 38692), (20, 38764), (21, 38773), (23, 38815), (24, 38905), (27, 38959), (29, 39010), (30, 39016), (31, 39031), (32, 39088), (34, 39109), (35, 39115), (36, 39121), (37, 39142), (40, 39163), (41, 39172), (42, 39202), (43, 39208), (46, 39469), (47, 39505), (49, 39559), (51, 39592), (52, 39610), (54, 39637), (58, 39667), (61, 39700),

Gene: FlyingTortilla\_52 Start: 43151, Stop: 44503, Start Num: 4

Candidate Starts for FlyingTortilla\_52:

(1, 43046), (3, 43106), (Start: 4 @43151 has 6 MA's), (7, 43220), (10, 43253), (13, 43364), (14, 43379), (16, 43391), (18, 43448), (19, 43481), (20, 43553), (22, 43595), (24, 43694), (28, 43757), (29, 43799), (30, 43805), (31, 43820), (32, 43877), (34, 43898), (35, 43904), (37, 43931), (39, 43949), (40, 43952), (41, 43961), (44, 44204), (46, 44258), (48, 44309), (49, 44348), (50, 44378), (51, 44381), (52, 44399), (54, 44426), (61, 44489),

Gene: GMA6\_37 Start: 30895, Stop: 32241, Start Num: 5

Candidate Starts for GMA6\_37:

(5, 30895), (8, 30964), (9, 30970), (12, 31012), (13, 31093), (14, 31108), (15, 31114), (16, 31120), (17, 31156), (20, 31282), (23, 31333), (25, 31435), (29, 31528), (30, 31534), (31, 31549), (33, 31618), (37,

31660), (38, 31675), (45, 31954), (46, 31996), (47, 32032), (50, 32116), (52, 32137), (53, 32143), (54, 32164), (55, 32167), (56, 32179), (57, 32191), (59, 32197), (60, 32209),

Gene: Gray\_52 Start: 39572, Stop: 40924, Start Num: 4

Candidate Starts for Gray\_52:

(1, 39467), (2, 39482), (3, 39527), (Start: 4 @39572 has 6 MA's), (6, 39623), (10, 39674), (11, 39686), (13, 39785), (14, 39800), (15, 39806), (16, 39812), (18, 39869), (19, 39902), (20, 39974), (21, 39983), (23, 40025), (24, 40115), (26, 40151), (27, 40169), (29, 40220), (30, 40226), (31, 40241), (32, 40298), (34, 40319), (35, 40325), (36, 40331), (37, 40352), (40, 40373), (41, 40382), (42, 40412), (43, 40418), (46, 40679), (47, 40715), (49, 40769), (51, 40802), (52, 40820), (54, 40847), (58, 40877), (61, 40910),

Gene: Hanem\_52 Start: 39571, Stop: 40923, Start Num: 4

Candidate Starts for Hanem\_52:

(1, 39466), (2, 39481), (3, 39526), (Start: 4 @39571 has 6 MA's), (6, 39622), (10, 39673), (11, 39685), (13, 39784), (14, 39799), (15, 39805), (16, 39811), (18, 39868), (19, 39901), (20, 39973), (21, 39982), (23, 40024), (24, 40114), (26, 40150), (27, 40168), (29, 40219), (30, 40225), (31, 40240), (32, 40297), (34, 40318), (35, 40324), (36, 40330), (37, 40351), (40, 40372), (41, 40381), (42, 40411), (43, 40417), (46, 40678), (47, 40714), (49, 40768), (51, 40801), (52, 40819), (54, 40846), (58, 40876), (61, 40909),

Gene: Kabocha\_53 Start: 40384, Stop: 41736, Start Num: 4

Candidate Starts for Kabocha\_53:

(1, 40279), (2, 40294), (3, 40339), (Start: 4 @40384 has 6 MA's), (6, 40435), (10, 40486), (11, 40498), (13, 40597), (14, 40612), (15, 40618), (16, 40624), (18, 40681), (19, 40714), (20, 40786), (21, 40795), (23, 40837), (24, 40927), (26, 40963), (27, 40981), (29, 41032), (30, 41038), (31, 41053), (32, 41110), (34, 41131), (35, 41137), (36, 41143), (37, 41164), (40, 41185), (41, 41194), (42, 41224), (43, 41230), (46, 41491), (47, 41527), (49, 41581), (51, 41614), (52, 41632), (54, 41659), (58, 41689), (61, 41722),

Gene: Oogie\_52 Start: 41277, Stop: 42629, Start Num: 4

Candidate Starts for Oogie\_52:

(1, 41172), (2, 41187), (3, 41232), (Start: 4 @41277 has 6 MA's), (6, 41328), (10, 41379), (11, 41391), (13, 41490), (14, 41505), (15, 41511), (16, 41517), (18, 41574), (19, 41607), (20, 41679), (21, 41688), (23, 41730), (24, 41820), (27, 41874), (29, 41925), (30, 41931), (31, 41946), (32, 42003), (34, 42024), (35, 42030), (36, 42036), (37, 42057), (40, 42078), (41, 42087), (42, 42117), (43, 42123), (46, 42384), (47, 42420), (49, 42474), (51, 42507), (52, 42525), (54, 42552), (58, 42582), (61, 42615),

Gene: Pakusa\_50 Start: 39313, Stop: 40665, Start Num: 4

Candidate Starts for Pakusa\_50:

(1, 39208), (2, 39223), (3, 39268), (Start: 4 @39313 has 6 MA's), (6, 39364), (10, 39415), (11, 39427), (13, 39526), (14, 39541), (15, 39547), (16, 39553), (18, 39610), (19, 39643), (20, 39715), (21, 39724), (23, 39766), (24, 39856), (26, 39892), (27, 39910), (29, 39961), (30, 39967), (31, 39982), (32, 40039), (34, 40060), (35, 40066), (36, 40072), (37, 40093), (40, 40114), (41, 40123), (42, 40153), (43, 40159), (46, 40420), (47, 40456), (49, 40510), (51, 40543), (52, 40561), (54, 40588), (58, 40618), (61, 40651),

Gene: ScarletRaider\_51 Start: 42459, Stop: 43811, Start Num: 4

Candidate Starts for ScarletRaider\_51:

(1, 42354), (3, 42414), (Start: 4 @42459 has 6 MA's), (7, 42528), (10, 42561), (13, 42672), (14, 42687), (16, 42699), (18, 42756), (19, 42789), (20, 42861), (22, 42903), (24, 43002), (28, 43065), (29, 43107), (30, 43113), (31, 43128), (32, 43185), (34, 43206), (35, 43212), (37, 43239), (39, 43257), (40, 43260), (41, 43269), (44, 43512), (46, 43566), (48, 43617), (49, 43656), (50, 43686), (51, 43689), (52, 43707), (54, 43734), (61, 43797),

Gene: Schomber\_51 Start: 39321, Stop: 40673, Start Num: 4

Candidate Starts for Schomber\_51:

(1, 39216), (2, 39231), (3, 39276), (Start: 4 @39321 has 6 MA's), (6, 39372), (10, 39423), (11, 39435),  
(13, 39534), (14, 39549), (15, 39555), (16, 39561), (18, 39618), (19, 39651), (20, 39723), (21, 39732),  
(23, 39774), (24, 39864), (26, 39900), (27, 39918), (29, 39969), (30, 39975), (31, 39990), (32, 40047),  
(34, 40068), (35, 40074), (36, 40080), (37, 40101), (40, 40122), (41, 40131), (42, 40161), (43, 40167),  
(46, 40428), (47, 40464), (49, 40518), (51, 40551), (52, 40569), (54, 40596), (58, 40626), (61, 40659),

Gene: UBSmoodge\_54 Start: 42917, Stop: 44269, Start Num: 4

Candidate Starts for UBSmoodge\_54:

(1, 42812), (3, 42872), (Start: 4 @42917 has 6 MA's), (7, 42986), (10, 43019), (13, 43130), (14,  
43145), (16, 43157), (18, 43214), (19, 43247), (20, 43319), (22, 43361), (24, 43460), (28, 43523), (29,  
43565), (30, 43571), (31, 43586), (32, 43643), (34, 43664), (35, 43670), (37, 43697), (39, 43715), (40,  
43718), (41, 43727), (44, 43970), (46, 44024), (48, 44075), (49, 44114), (50, 44144), (51, 44147), (52,  
44165), (54, 44192), (61, 44255),