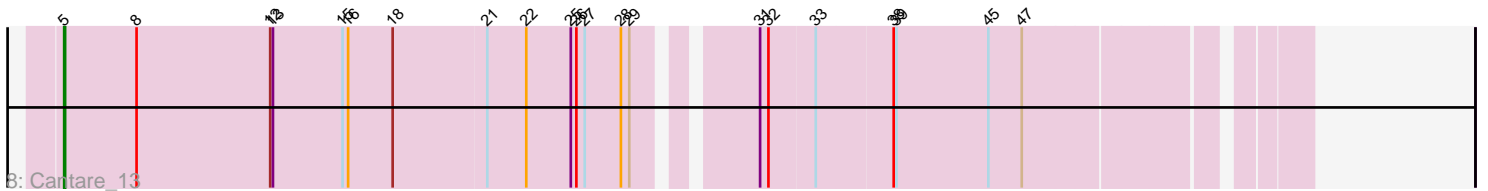
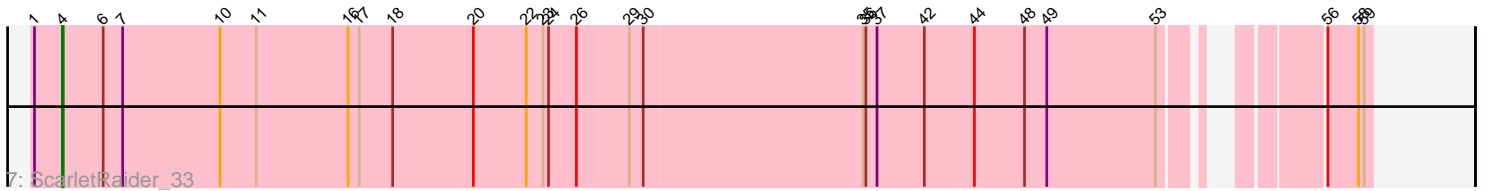
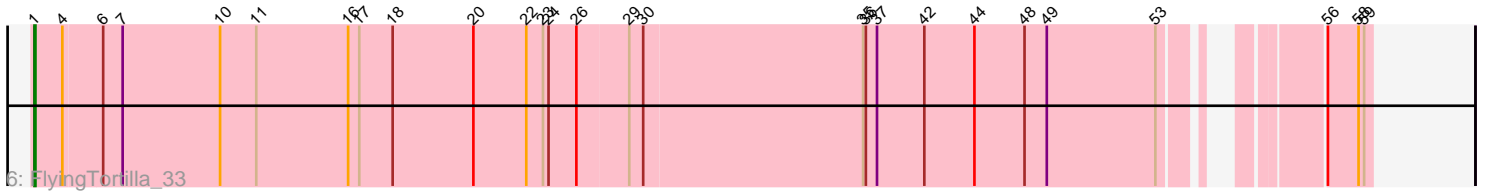
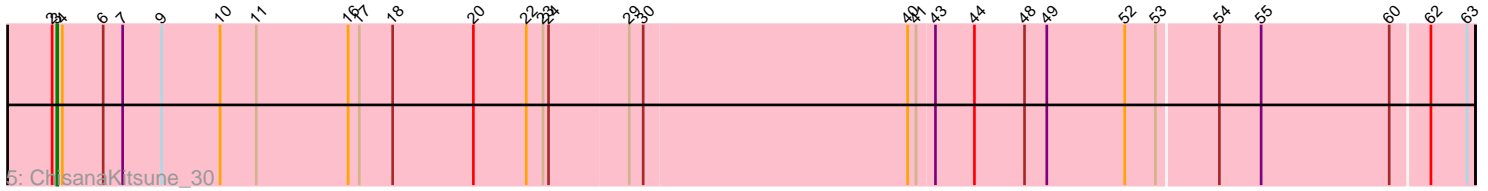
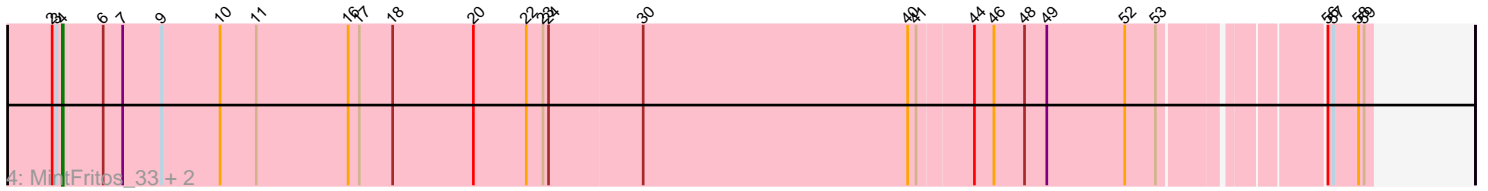
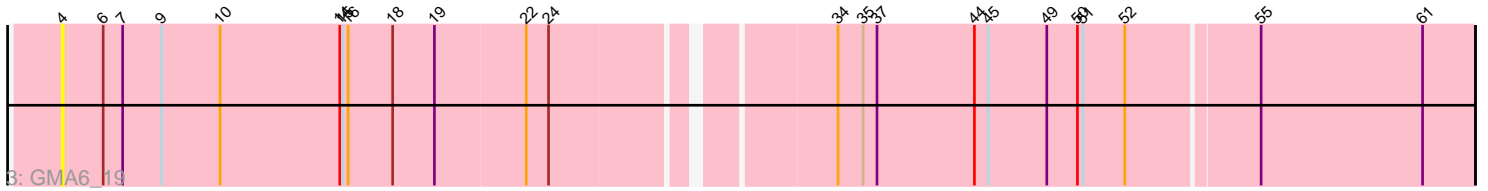
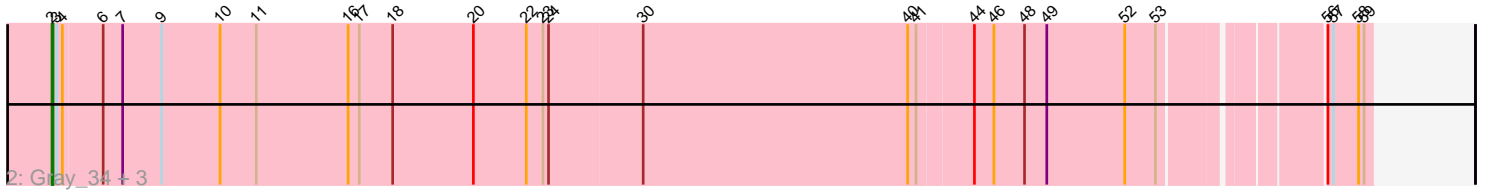
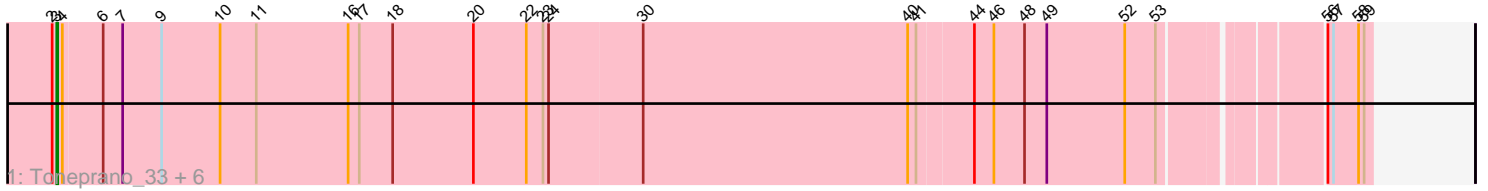


Pham 224916



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 224916 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224916 has 19 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Toneprano_33, EmoNemo_33, Kabocha_35, Hanem_34, Twin_33, Schomber_33, Oogie_34
- Track 2 : Gray_34, Beted_34, Pakusa_33, Lenoshki_34
- Track 3 : GMA6_19
- Track 4 : MintFritos_33, Alok_33, Chidiebere_34
- Track 5 : ChisanaKitsune_30
- Track 6 : FlyingTortilla_33
- Track 7 : ScarletRaider_33
- Track 8 : Cantare_13

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 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ChisanaKitsune_30, EmoNemo_33, Hanem_34, Kabocha_35, Oogie_34, Schomber_33, Toneprano_33, Twin_33,

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

- Alok_33, Beted_34, Chidiebere_34, Gray_34, Lenoshki_34, MintFritos_33, Pakusa_33,

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

- Cantare_13, FlyingTortilla_33, GMA6_19, ScarletRaider_33,

Summary by start number:

Start 1:

- Found in 2 of 19 (10.5%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: FlyingTortilla_33 (DQ),

Start 2:

- Found in 15 of 19 (78.9%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 26.7% of time when present
- Phage (with cluster) where this start called: Beted_34 (DQ), Gray_34 (DQ), Lenoshki_34 (DQ), Pakusa_33 (DQ),

Start 3:

- Found in 15 of 19 (78.9%) of genes in pham
- Manual Annotations of this start: 4 of 9
- Called 53.3% of time when present
- Phage (with cluster) where this start called: ChisanaKitsune_30 (DQ), EmoNemo_33 (DQ), Hanem_34 (DQ), Kabocha_35 (DQ), Oogie_34 (DQ), Schomber_33 (DQ), Toneprano_33 (DQ), Twin_33 (DQ),

Start 4:

- Found in 18 of 19 (94.7%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 27.8% of time when present
- Phage (with cluster) where this start called: Aloki_33 (DQ), Chidiebere_34 (DQ), GMA6_19 (DQ), MintFritos_33 (DQ), ScarletRaider_33 (DQ),

Start 5:

- Found in 1 of 19 (5.3%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_13 (singleton),

Summary by clusters:

There are 2 clusters represented in this pham: singleton, DQ,

Info for manual annotations of cluster DQ:

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

Gene Information:

Gene: Aloki_33 Start: 23793, Stop: 25151, Start Num: 4

Candidate Starts for Aloki_33:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: Beted_34 Start: 25461, Stop: 26831, Start Num: 2

Candidate Starts for Beted_34:

(Start: 2 @25461 has 1 MA's), (Start: 3 @25464 has 4 MA's), (Start: 4 @25470 has 2 MA's), (6, 25512), (7, 25533), (9, 25575), (10, 25638), (11, 25677), (16, 25776), (17, 25788), (18, 25824), (20, 25911), (22, 25968), (23, 25986), (24, 25992), (30, 26091), (40, 26376), (41, 26385), (44, 26442), (46, 26463), (48, 26496), (49, 26520), (52, 26604), (53, 26637), (56, 26784), (57, 26790), (58, 26817), (59, 26823),

Gene: Cantare_13 Start: 12173, Stop: 13426, Start Num: 5

Candidate Starts for Cantare_13:

(Start: 5 @12173 has 1 MA's), (8, 12251), (12, 12395), (13, 12398), (15, 12473), (16, 12479), (18, 12527), (21, 12626), (22, 12668), (25, 12716), (26, 12722), (27, 12731), (28, 12770), (29, 12779), (31, 12884), (32, 12893), (33, 12941), (38, 13019), (39, 13022), (45, 13121), (47, 13157),

Gene: Chidiebere_34 Start: 23793, Stop: 25151, Start Num: 4

Candidate Starts for Chidiebere_34:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: ChisanaKitsune_30 Start: 22439, Stop: 23944, Start Num: 3

Candidate Starts for ChisanaKitsune_30:

(Start: 2 @22436 has 1 MA's), (Start: 3 @22439 has 4 MA's), (Start: 4 @22445 has 2 MA's), (6, 22487), (7, 22508), (9, 22550), (10, 22613), (11, 22652), (16, 22751), (17, 22763), (18, 22799), (20, 22886), (22, 22943), (23, 22961), (24, 22967), (29, 23051), (30, 23066), (40, 23348), (41, 23357), (43, 23375), (44, 23417), (48, 23471), (49, 23495), (52, 23579), (53, 23612), (54, 23675), (55, 23720), (60, 23858), (62, 23897), (63, 23936),

Gene: EmoNemo_33 Start: 23787, Stop: 25151, Start Num: 3

Candidate Starts for EmoNemo_33:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: FlyingTortilla_33 Start: 26668, Stop: 28026, Start Num: 1

Candidate Starts for FlyingTortilla_33:

(Start: 1 @26668 has 1 MA's), (Start: 4 @26698 has 2 MA's), (6, 26737), (7, 26758), (10, 26863), (11, 26902), (16, 27001), (17, 27013), (18, 27049), (20, 27136), (22, 27193), (23, 27211), (24, 27217), (26, 27247), (29, 27301), (30, 27316), (35, 27550), (36, 27553), (37, 27565), (42, 27616), (44, 27670), (48, 27724), (49, 27748), (53, 27865), (56, 27979), (58, 28012), (59, 28018),

Gene: GMA6_19 Start: 15585, Stop: 17039, Start Num: 4

Candidate Starts for GMA6_19:

(Start: 4 @15585 has 2 MA's), (6, 15624), (7, 15645), (9, 15687), (10, 15750), (14, 15879), (15, 15882), (16, 15888), (18, 15936), (19, 15981), (22, 16077), (24, 16101), (34, 16368), (35, 16395), (37, 16410), (44, 16515), (45, 16530), (49, 16593), (50, 16626), (51, 16632), (52, 16677), (55, 16812), (61, 16986),

Gene: Gray_34 Start: 23784, Stop: 25151, Start Num: 2

Candidate Starts for Gray_34:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20,

24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: Hanem_34 Start: 23787, Stop: 25151, Start Num: 3

Candidate Starts for Hanem_34:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: Kabocha_35 Start: 24600, Stop: 25964, Start Num: 3

Candidate Starts for Kabocha_35:

(Start: 2 @24597 has 1 MA's), (Start: 3 @24600 has 4 MA's), (Start: 4 @24606 has 2 MA's), (6, 24645), (7, 24666), (9, 24708), (10, 24771), (11, 24810), (16, 24909), (17, 24921), (18, 24957), (20, 25044), (22, 25101), (23, 25119), (24, 25125), (30, 25224), (40, 25509), (41, 25518), (44, 25575), (46, 25596), (48, 25629), (49, 25653), (52, 25737), (53, 25770), (56, 25917), (57, 25923), (58, 25950), (59, 25956),

Gene: Lenoshki_34 Start: 25461, Stop: 26831, Start Num: 2

Candidate Starts for Lenoshki_34:

(Start: 2 @25461 has 1 MA's), (Start: 3 @25464 has 4 MA's), (Start: 4 @25470 has 2 MA's), (6, 25512), (7, 25533), (9, 25575), (10, 25638), (11, 25677), (16, 25776), (17, 25788), (18, 25824), (20, 25911), (22, 25968), (23, 25986), (24, 25992), (30, 26091), (40, 26376), (41, 26385), (44, 26442), (46, 26463), (48, 26496), (49, 26520), (52, 26604), (53, 26637), (56, 26784), (57, 26790), (58, 26817), (59, 26823),

Gene: MintFritos_33 Start: 23793, Stop: 25151, Start Num: 4

Candidate Starts for MintFritos_33:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: Oogie_34 Start: 25490, Stop: 26857, Start Num: 3

Candidate Starts for Oogie_34:

(Start: 2 @25487 has 1 MA's), (Start: 3 @25490 has 4 MA's), (Start: 4 @25496 has 2 MA's), (6, 25538), (7, 25559), (9, 25601), (10, 25664), (11, 25703), (16, 25802), (17, 25814), (18, 25850), (20, 25937), (22, 25994), (23, 26012), (24, 26018), (30, 26117), (40, 26402), (41, 26411), (44, 26468), (46, 26489), (48, 26522), (49, 26546), (52, 26630), (53, 26663), (56, 26810), (57, 26816), (58, 26843), (59, 26849),

Gene: Pakusa_33 Start: 23526, Stop: 24893, Start Num: 2

Candidate Starts for Pakusa_33:

(Start: 2 @23526 has 1 MA's), (Start: 3 @23529 has 4 MA's), (Start: 4 @23535 has 2 MA's), (6, 23574), (7, 23595), (9, 23637), (10, 23700), (11, 23739), (16, 23838), (17, 23850), (18, 23886), (20, 23973), (22, 24030), (23, 24048), (24, 24054), (30, 24153), (40, 24438), (41, 24447), (44, 24504), (46, 24525), (48, 24558), (49, 24582), (52, 24666), (53, 24699), (56, 24846), (57, 24852), (58, 24879), (59, 24885),

Gene: ScarletRaider_33 Start: 26725, Stop: 28053, Start Num: 4

Candidate Starts for ScarletRaider_33:

(Start: 1 @26695 has 1 MA's), (Start: 4 @26725 has 2 MA's), (6, 26764), (7, 26785), (10, 26890), (11, 26929), (16, 27028), (17, 27040), (18, 27076), (20, 27163), (22, 27220), (23, 27238), (24, 27244), (26, 27274), (29, 27328), (30, 27343), (35, 27577), (36, 27580), (37, 27592), (42, 27643), (44, 27697), (48, 27751), (49, 27775), (53, 27892), (56, 28006), (58, 28039), (59, 28045),

Gene: Schomber_33 Start: 23537, Stop: 24901, Start Num: 3

Candidate Starts for Schomber_33:

(Start: 2 @23534 has 1 MA's), (Start: 3 @23537 has 4 MA's), (Start: 4 @23543 has 2 MA's), (6, 23582), (7, 23603), (9, 23645), (10, 23708), (11, 23747), (16, 23846), (17, 23858), (18, 23894), (20, 23981), (22, 24038), (23, 24056), (24, 24062), (30, 24161), (40, 24446), (41, 24455), (44, 24512), (46, 24533), (48, 24566), (49, 24590), (52, 24674), (53, 24707), (56, 24854), (57, 24860), (58, 24887), (59, 24893),

Gene: Toneprano_33 Start: 23787, Stop: 25151, Start Num: 3

Candidate Starts for Toneprano_33:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),

Gene: Twin_33 Start: 23787, Stop: 25151, Start Num: 3

Candidate Starts for Twin_33:

(Start: 2 @23784 has 1 MA's), (Start: 3 @23787 has 4 MA's), (Start: 4 @23793 has 2 MA's), (6, 23832), (7, 23853), (9, 23895), (10, 23958), (11, 23997), (16, 24096), (17, 24108), (18, 24144), (20, 24231), (22, 24288), (23, 24306), (24, 24312), (30, 24411), (40, 24696), (41, 24705), (44, 24762), (46, 24783), (48, 24816), (49, 24840), (52, 24924), (53, 24957), (56, 25104), (57, 25110), (58, 25137), (59, 25143),