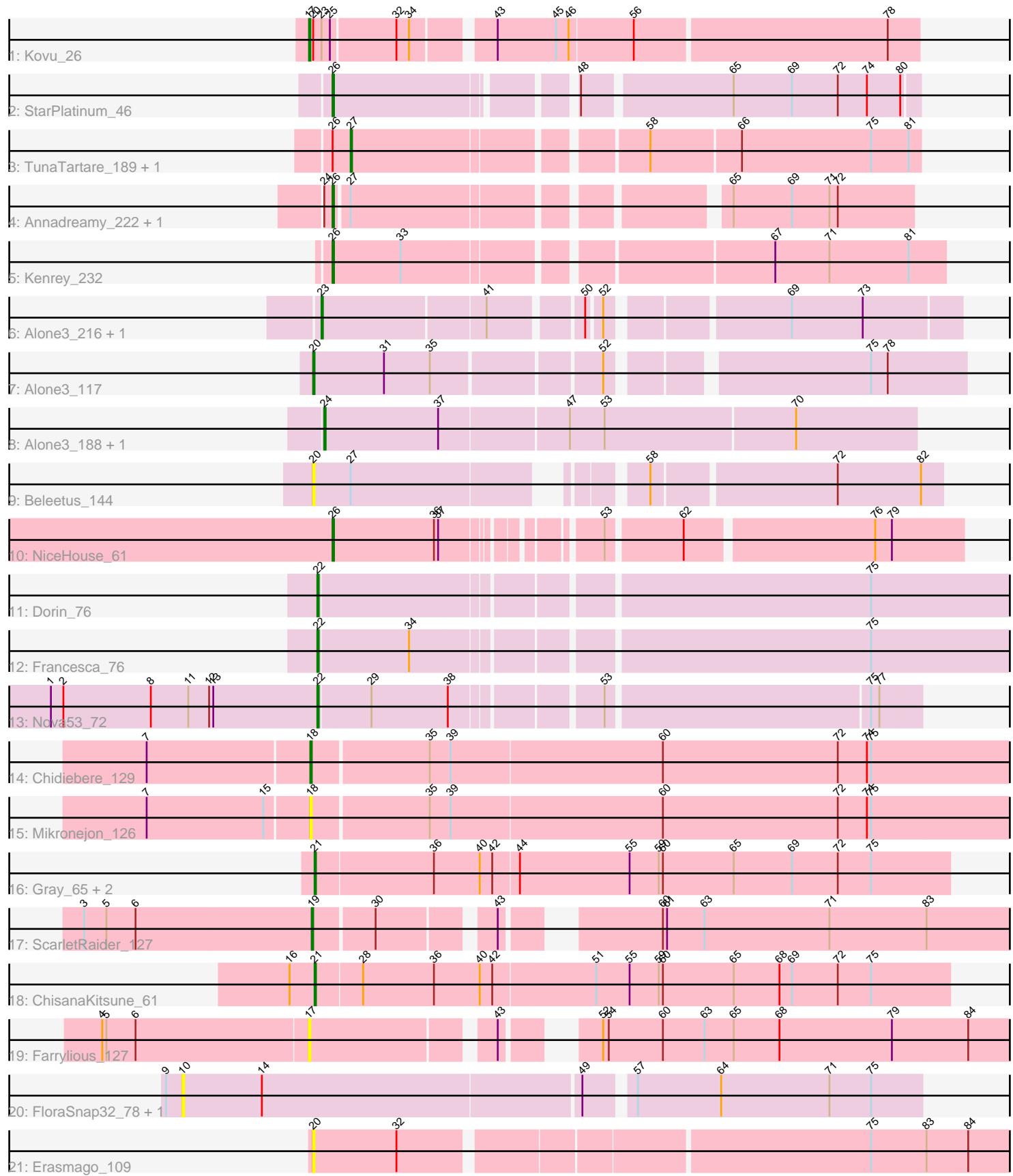


Pham 280761



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 280761 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280761 has 28 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Kovu\_26
- Track 2 : StarPlatinum\_46
- Track 3 : TunaTartare\_189, Sham\_181
- Track 4 : Annadreamy\_222, Limpid\_229
- Track 5 : Kenrey\_232
- Track 6 : Alone3\_216, Talos\_215
- Track 7 : Alone3\_117
- Track 8 : Alone3\_188, Talos\_188
- Track 9 : Beleetus\_144
- Track 10 : NiceHouse\_61
- Track 11 : Dorin\_76
- Track 12 : Francesca\_76
- Track 13 : Nova53\_72
- Track 14 : Chidiebere\_129
- Track 15 : Mikronejon\_126
- Track 16 : Gray\_65, Chidiebere\_65, Kabocha\_66
- Track 17 : ScarletRaider\_127
- Track 18 : ChisanaKitsune\_61
- Track 19 : Farrylious\_127
- Track 20 : FloraSnap32\_78, Patbob\_79
- Track 21 : Erasmago\_109

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

The start number called the most often in the published annotations is 26, it was called in 5 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annadreamy\_222, Kenrey\_232, Limpid\_229, NiceHouse\_61, StarPlatinum\_46,

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

- Sham\_181, TunaTartare\_189,

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

- Alone3\_117, Alone3\_188, Alone3\_216, Beleetus\_144, Chidiebere\_129, Chidiebere\_65, ChisanaKitsune\_61, Dorin\_76, Erasmago\_109, Farrylious\_127, FloraSnap32\_78, Francesca\_76, Gray\_65, Kabocha\_66, Kovu\_26, Mikronejon\_126, Nova53\_72, Patbob\_79, ScarletRaider\_127, Talos\_188, Talos\_215,

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

#### Start 10:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FloraSnap32\_78 (FC), Patbob\_79 (FC),

#### Start 17:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farrylious\_127 (DQ), Kovu\_26 (AL),

#### Start 18:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chidiebere\_129 (DQ), Mikronejon\_126 (DQ),

#### Start 19:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScarletRaider\_127 (DQ),

#### Start 20:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Alone3\_117 (BS), Beleetus\_144 (BS), Erasmago\_109 (GD2),

#### Start 21:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chidiebere\_65 (DQ), ChisanaKitsune\_61 (DQ), Gray\_65 (DQ), Kabocha\_66 (DQ),

#### Start 22:

- Found in 3 of 28 ( 10.7% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin\_76 (CG), Francesca\_76 (CG), Nova53\_72 (CG),

Start 23:

- Found in 3 of 28 ( 10.7% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Alone3\_216 (BS), Talos\_215 (BS),

Start 24:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Alone3\_188 (BS), Talos\_188 (BS),

Start 26:

- Found in 7 of 28 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 5 of 22
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Annadreamy\_222 (BK1), Kenrey\_232 (BK1), Limpid\_229 (BK1), NiceHouse\_61 (CE), StarPlatinum\_46 (BE2),

Start 27:

- Found in 5 of 28 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Sham\_181 (BK1), TunaTartare\_189 (BK1),

### **Summary by clusters:**

There are 9 clusters represented in this pham: GD2, CG, AL, CE, FC, BK1, BS, BE2, DQ,

Info for manual annotations of cluster AL:

- Start number 17 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster BE2:

- Start number 26 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 26 was manually annotated 3 times for cluster BK1.
- Start number 27 was manually annotated 2 times for cluster BK1.

Info for manual annotations of cluster BS:

- Start number 20 was manually annotated 1 time for cluster BS.
- Start number 23 was manually annotated 2 times for cluster BS.
- Start number 24 was manually annotated 2 times for cluster BS.

Info for manual annotations of cluster CE:

- Start number 26 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:

- Start number 22 was manually annotated 3 times for cluster CG.

Info for manual annotations of cluster DQ:

- Start number 18 was manually annotated 1 time for cluster DQ.
- Start number 19 was manually annotated 1 time for cluster DQ.
- Start number 21 was manually annotated 4 times for cluster DQ.

**Gene Information:**

Gene: Alone3\_216 Start: 111609, Stop: 111190, Start Num: 23

Candidate Starts for Alone3\_216:

(Start: 23 @111609 has 2 MA's), (41, 111495), (50, 111435), (52, 111426), (69, 111309), (73, 111258),

Gene: Alone3\_117 Start: 62982, Stop: 63413, Start Num: 20

Candidate Starts for Alone3\_117:

(Start: 20 @62982 has 1 MA's), (31, 63033), (35, 63066), (52, 63177), (75, 63345), (78, 63357),

Gene: Alone3\_188 Start: 97401, Stop: 96985, Start Num: 24

Candidate Starts for Alone3\_188:

(Start: 24 @97401 has 2 MA's), (37, 97320), (47, 97230), (53, 97206), (70, 97071),

Gene: Annadreamy\_222 Start: 109759, Stop: 110133, Start Num: 26

Candidate Starts for Annadreamy\_222:

(Start: 24 @109753 has 2 MA's), (Start: 26 @109759 has 5 MA's), (Start: 27 @109768 has 2 MA's), (65, 110005), (69, 110047), (71, 110074), (72, 110080),

Gene: Beleetus\_144 Start: 78377, Stop: 78778, Start Num: 20

Candidate Starts for Beleetus\_144:

(Start: 20 @78377 has 1 MA's), (Start: 27 @78404 has 2 MA's), (58, 78578), (72, 78704), (82, 78764),

Gene: Chidiebere\_129 Start: 90897, Stop: 90346, Start Num: 18

Candidate Starts for Chidiebere\_129:

(7, 91011), (Start: 18 @90897 has 1 MA's), (35, 90816), (39, 90801), (60, 90651), (72, 90525), (74, 90504), (75, 90501),

Gene: Chidiebere\_65 Start: 51821, Stop: 52273, Start Num: 21

Candidate Starts for Chidiebere\_65:

(Start: 21 @51821 has 4 MA's), (36, 51905), (40, 51938), (42, 51947), (44, 51965), (55, 52043), (59, 52064), (60, 52067), (65, 52118), (69, 52160), (72, 52193), (75, 52217),

Gene: ChisanaKitsune\_61 Start: 50595, Stop: 51047, Start Num: 21

Candidate Starts for ChisanaKitsune\_61:

(16, 50577), (Start: 21 @50595 has 4 MA's), (28, 50628), (36, 50679), (40, 50712), (42, 50721), (51, 50793), (55, 50817), (59, 50838), (60, 50841), (65, 50892), (68, 50925), (69, 50934), (72, 50967), (75, 50991),

Gene: Dorin\_76 Start: 59997, Stop: 60470, Start Num: 22

Candidate Starts for Dorin\_76:

(Start: 22 @59997 has 3 MA's), (75, 60369),

Gene: Erasmago\_109 Start: 78875, Stop: 79378, Start Num: 20

Candidate Starts for Erasmago\_109:

(Start: 20 @78875 has 1 MA's), (32, 78935), (75, 79253), (83, 79292), (84, 79322),

Gene: Farrylious\_127 Start: 89655, Stop: 89143, Start Num: 17

Candidate Starts for Farrylious\_127:

(4, 89802), (5, 89799), (6, 89778), (Start: 17 @89655 has 1 MA's), (43, 89535), (52, 89490), (54, 89487), (60, 89448), (63, 89418), (65, 89397), (68, 89364), (79, 89283), (84, 89229),

Gene: FloraSnap32\_78 Start: 42949, Stop: 42437, Start Num: 10

Candidate Starts for FloraSnap32\_78:

(9, 42961), (10, 42949), (14, 42892), (49, 42670), (57, 42640), (64, 42580), (71, 42502), (75, 42472),

Gene: Francesca\_76 Start: 60735, Stop: 61208, Start Num: 22

Candidate Starts for Francesca\_76:

(Start: 22 @60735 has 3 MA's), (34, 60798), (75, 61107),

Gene: Gray\_65 Start: 51821, Stop: 52273, Start Num: 21

Candidate Starts for Gray\_65:

(Start: 21 @51821 has 4 MA's), (36, 51905), (40, 51938), (42, 51947), (44, 51965), (55, 52043), (59, 52064), (60, 52067), (65, 52118), (69, 52160), (72, 52193), (75, 52217),

Gene: Kabocha\_66 Start: 52633, Stop: 53085, Start Num: 21

Candidate Starts for Kabocha\_66:

(Start: 21 @52633 has 4 MA's), (36, 52717), (40, 52750), (42, 52759), (44, 52777), (55, 52855), (59, 52876), (60, 52879), (65, 52930), (69, 52972), (72, 53005), (75, 53029),

Gene: Kenrey\_232 Start: 111193, Stop: 111606, Start Num: 26

Candidate Starts for Kenrey\_232:

(Start: 26 @111193 has 5 MA's), (33, 111241), (67, 111484), (71, 111523), (81, 111580),

Gene: Kovu\_26 Start: 17736, Stop: 17326, Start Num: 17

Candidate Starts for Kovu\_26:

(Start: 17 @17736 has 1 MA's), (Start: 20 @17733 has 1 MA's), (Start: 23 @17727 has 2 MA's), (25, 17721), (32, 17676), (34, 17667), (43, 17616), (45, 17574), (46, 17565), (56, 17520), (78, 17346),

Gene: Limpid\_229 Start: 115072, Stop: 115446, Start Num: 26

Candidate Starts for Limpid\_229:

(Start: 24 @115066 has 2 MA's), (Start: 26 @115072 has 5 MA's), (Start: 27 @115081 has 2 MA's), (65, 115318), (69, 115360), (71, 115387), (72, 115393),

Gene: Mikronejon\_126 Start: 90250, Stop: 89696, Start Num: 18

Candidate Starts for Mikronejon\_126:

(7, 90364), (15, 90280), (Start: 18 @90250 has 1 MA's), (35, 90169), (39, 90154), (60, 90004), (72, 89878), (74, 89857), (75, 89854),

Gene: NiceHouse\_61 Start: 34862, Stop: 35269, Start Num: 26

Candidate Starts for NiceHouse\_61:

(Start: 26 @34862 has 5 MA's), (36, 34934), (37, 34937), (53, 35027), (62, 35078), (76, 35207), (79, 35219),

Gene: Nova53\_72 Start: 59567, Stop: 59971, Start Num: 22

Candidate Starts for Nova53\_72:

(1, 59375), (2, 59384), (8, 59447), (11, 59474), (12, 59489), (13, 59492), (Start: 22 @59567 has 3 MA's), (29, 59603), (38, 59657), (53, 59753), (75, 59936), (77, 59942),

Gene: Patbob\_79 Start: 44134, Stop: 43622, Start Num: 10

Candidate Starts for Patbob\_79:

(9, 44146), (10, 44134), (14, 44077), (49, 43855), (57, 43825), (64, 43765), (71, 43687), (75, 43657),

Gene: ScarletRaider\_127 Start: 92635, Stop: 92135, Start Num: 19

Candidate Starts for ScarletRaider\_127:

(3, 92797), (5, 92782), (6, 92761), (Start: 19 @92635 has 1 MA's), (30, 92593), (43, 92521), (60, 92434), (61, 92431), (63, 92404), (71, 92314), (83, 92245),

Gene: Sham\_181 Start: 98652, Stop: 99035, Start Num: 27

Candidate Starts for Sham\_181:

(Start: 26 @98640 has 5 MA's), (Start: 27 @98652 has 2 MA's), (58, 98844), (66, 98907), (75, 99000), (81, 99027),

Gene: StarPlatinum\_46 Start: 22656, Stop: 23042, Start Num: 26

Candidate Starts for StarPlatinum\_46:

(Start: 26 @22656 has 5 MA's), (48, 22809), (65, 22911), (69, 22953), (72, 22986), (74, 23007), (80, 23031),

Gene: Talos\_215 Start: 109729, Stop: 109310, Start Num: 23

Candidate Starts for Talos\_215:

(Start: 23 @109729 has 2 MA's), (41, 109615), (50, 109555), (52, 109546), (69, 109429), (73, 109378),

Gene: Talos\_188 Start: 95931, Stop: 95515, Start Num: 24

Candidate Starts for Talos\_188:

(Start: 24 @95931 has 2 MA's), (37, 95850), (47, 95760), (53, 95736), (70, 95601),

Gene: TunaTartare\_189 Start: 100701, Stop: 101084, Start Num: 27

Candidate Starts for TunaTartare\_189:

(Start: 26 @100689 has 5 MA's), (Start: 27 @100701 has 2 MA's), (58, 100893), (66, 100956), (75, 101049), (81, 101076),