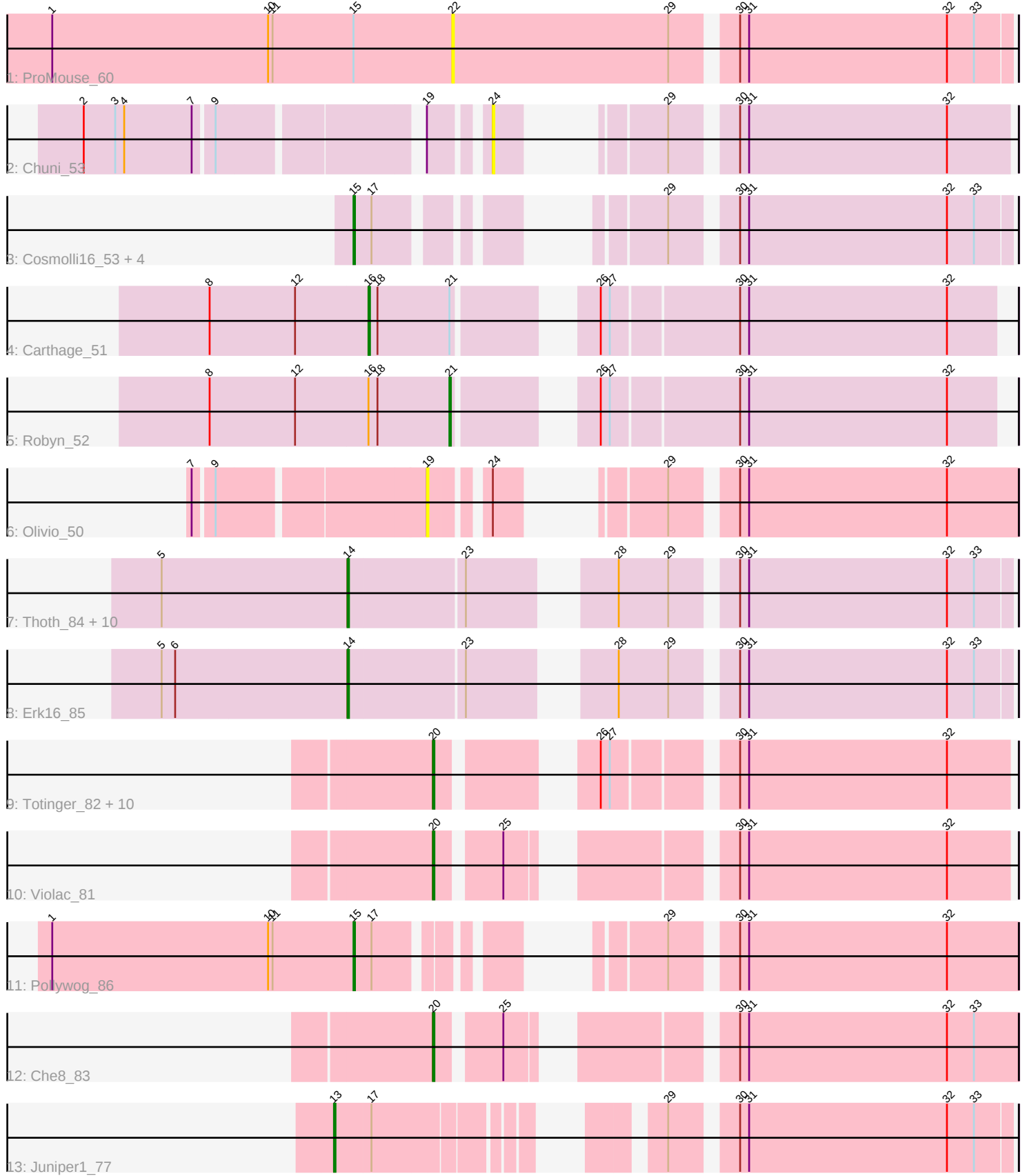


Pham 280639



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 280639 Report

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

Pham number 280639 has 37 members, 7 are drafts.

Phages represented in each track:

- Track 1 : ProMouse_60
- Track 2 : Chuni_53
- Track 3 : Cosmolli16_53, LeiMonet_54, Giraffe_53, Grand2040_52, Maru_52
- Track 4 : Carthage_51
- Track 5 : Robyn_52
- Track 6 : Olivio_50
- Track 7 : Thoth_84, Prager_84, Adjutor_82, Chill_85, Butterscotch_82, WaldoWhy_85, Mopey_86, Giuseppe_86, PLOT_85, Visconti_85, Penelope2018_84
- Track 8 : Erk16_85
- Track 9 : Totinger_82, Vivum_82, Peridot_84, Nivrat_76, PhilipPhlop_81, Fastidio_80, LilMoolah_78, GigiOuiOui_74, EmiMonkey_80, Starcevich_80, LittleShirley_86
- Track 10 : Violac_81
- Track 11 : Pollywog_86
- Track 12 : Che8_83
- Track 13 : Juniper1_77

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

The start number called the most often in the published annotations is 14, it was called in 12 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjutor_82, Butterscotch_82, Chill_85, Erk16_85, Giuseppe_86, Mopey_86, PLOT_85, Penelope2018_84, Prager_84, Thoth_84, Visconti_85, WaldoWhy_85,

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

-

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

- Carthage_51, Che8_83, Chuni_53, Cosmolli16_53, EmiMonkey_80, Fastidio_80, GigiOuiOui_74, Giraffe_53, Grand2040_52, Juniper1_77, LeiMonet_54, LilMoolah_78, LittleShirley_86, Maru_52, Nivrat_76, Olivio_50, Peridot_84, PhilipPhlop_81, Pollywog_86, ProMouse_60, Robyn_52, Starcevich_80, Totinger_82,

Violac_81, Vivum_82,

Summary by start number:

Start 13:

- Found in 1 of 37 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juniper1_77 (F1),

Start 14:

- Found in 12 of 37 (32.4%) of genes in pham
- Manual Annotations of this start: 12 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adjutor_82 (D1), Butterscotch_82 (D1), Chill_85 (D1), Erk16_85 (D1), Giuseppe_86 (D1), Mopey_86 (D1), PLOT_85 (D1), Penelope2018_84 (D1), Prager_84 (D1), Thoth_84 (D1), Visconti_85 (D1), WaldoWhy_85 (D1),

Start 15:

- Found in 7 of 37 (18.9%) of genes in pham
- Manual Annotations of this start: 5 of 30
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Cosmolli16_53 (B1), Giraffe_53 (B1), Grand2040_52 (B1), LeiMonet_54 (B1), Maru_52 (B1), Pollywog_86 (F1),

Start 16:

- Found in 2 of 37 (5.4%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Carthage_51 (B1),

Start 19:

- Found in 2 of 37 (5.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Olivio_50 (B3),

Start 20:

- Found in 13 of 37 (35.1%) of genes in pham
- Manual Annotations of this start: 10 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che8_83 (F1), EmiMonkey_80 (F1), Fastidio_80 (F1), GigiOuiOui_74 (F1), LilMoolah_78 (F1), LittleShirley_86 (F1), Nivrat_76 (F1), Peridot_84 (F1), PhilipPhlop_81 (F1), Starcevich_80 (F1), Totinger_82 (F1), Violac_81 (F1), Vivum_82 (F1),

Start 21:

- Found in 2 of 37 (5.4%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Robyn_52 (B1),

Start 22:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ProMouse_60 (A1),

Start 24:

- Found in 2 of 37 (5.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chuni_53 (B1),

Summary by clusters:

There are 5 clusters represented in this pham: A1, F1, B3, B1, D1,

Info for manual annotations of cluster B1:

- Start number 15 was manually annotated 4 times for cluster B1.
- Start number 16 was manually annotated 1 time for cluster B1.
- Start number 21 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster D1:

- Start number 14 was manually annotated 12 times for cluster D1.

Info for manual annotations of cluster F1:

- Start number 13 was manually annotated 1 time for cluster F1.
- Start number 15 was manually annotated 1 time for cluster F1.
- Start number 20 was manually annotated 10 times for cluster F1.

Gene Information:

Gene: Adjutor_82 Start: 59655, Stop: 60050, Start Num: 14

Candidate Starts for Adjutor_82:

(5, 59532), (Start: 14 @59655 has 12 MA's), (23, 59730), (28, 59802), (29, 59835), (30, 59871), (31, 59877), (32, 60009), (33, 60027),

Gene: Butterscotch_82 Start: 59706, Stop: 60101, Start Num: 14

Candidate Starts for Butterscotch_82:

(5, 59583), (Start: 14 @59706 has 12 MA's), (23, 59781), (28, 59853), (29, 59886), (30, 59922), (31, 59928), (32, 60060), (33, 60078),

Gene: Carthage_51 Start: 46401, Stop: 46021, Start Num: 16

Candidate Starts for Carthage_51:

(8, 46506), (12, 46449), (Start: 16 @46401 has 1 MA's), (18, 46395), (Start: 21 @46347 has 1 MA's), (26, 46278), (27, 46272), (30, 46191), (31, 46185), (32, 46053),

Gene: Che8_83 Start: 48984, Stop: 49319, Start Num: 20

Candidate Starts for Che8_83:

(Start: 20 @48984 has 10 MA's), (25, 49020), (30, 49134), (31, 49140), (32, 49272), (33, 49290),

Gene: Chill_85 Start: 59683, Stop: 60078, Start Num: 14

Candidate Starts for Chill_85:

(5, 59560), (Start: 14 @59683 has 12 MA's), (23, 59758), (28, 59830), (29, 59863), (30, 59899), (31, 59905), (32, 60037), (33, 60055),

Gene: Chuni_53 Start: 47756, Stop: 47481, Start Num: 24

Candidate Starts for Chuni_53:

(2, 47990), (3, 47969), (4, 47963), (7, 47918), (9, 47906), (19, 47786), (24, 47756), (29, 47696), (30, 47660), (31, 47654), (32, 47522),

Gene: Cosmolli16_53 Start: 47545, Stop: 47198, Start Num: 15

Candidate Starts for Cosmolli16_53:

(Start: 15 @47545 has 5 MA's), (17, 47533), (29, 47413), (30, 47377), (31, 47371), (32, 47239), (33, 47221),

Gene: EmiMonkey_80 Start: 52533, Stop: 52862, Start Num: 20

Candidate Starts for EmiMonkey_80:

(Start: 20 @52533 has 10 MA's), (26, 52608), (27, 52614), (30, 52683), (31, 52689), (32, 52821),

Gene: Erk16_85 Start: 60039, Stop: 60434, Start Num: 14

Candidate Starts for Erk16_85:

(5, 59916), (6, 59925), (Start: 14 @60039 has 12 MA's), (23, 60114), (28, 60186), (29, 60219), (30, 60255), (31, 60261), (32, 60393), (33, 60411),

Gene: Fastidio_80 Start: 45795, Stop: 46124, Start Num: 20

Candidate Starts for Fastidio_80:

(Start: 20 @45795 has 10 MA's), (26, 45870), (27, 45876), (30, 45945), (31, 45951), (32, 46083),

Gene: GigiOuiOui_74 Start: 47391, Stop: 47720, Start Num: 20

Candidate Starts for GigiOuiOui_74:

(Start: 20 @47391 has 10 MA's), (26, 47466), (27, 47472), (30, 47541), (31, 47547), (32, 47679),

Gene: Giraffe_53 Start: 47326, Stop: 46979, Start Num: 15

Candidate Starts for Giraffe_53:

(Start: 15 @47326 has 5 MA's), (17, 47314), (29, 47194), (30, 47158), (31, 47152), (32, 47020), (33, 47002),

Gene: Giuseppe_86 Start: 59752, Stop: 60147, Start Num: 14

Candidate Starts for Giuseppe_86:

(5, 59629), (Start: 14 @59752 has 12 MA's), (23, 59827), (28, 59899), (29, 59932), (30, 59968), (31, 59974), (32, 60106), (33, 60124),

Gene: Grand2040_52 Start: 47320, Stop: 46973, Start Num: 15

Candidate Starts for Grand2040_52:

(Start: 15 @47320 has 5 MA's), (17, 47308), (29, 47188), (30, 47152), (31, 47146), (32, 47014), (33, 46996),

Gene: Juniper1_77 Start: 47775, Stop: 48149, Start Num: 13

Candidate Starts for Juniper1_77:

(Start: 13 @47775 has 1 MA's), (17, 47799), (29, 47934), (30, 47970), (31, 47976), (32, 48108), (33, 48126),

Gene: LeiMonet_54 Start: 47306, Stop: 46959, Start Num: 15
Candidate Starts for LeiMonet_54:
(Start: 15 @47306 has 5 MA's), (17, 47294), (29, 47174), (30, 47138), (31, 47132), (32, 47000), (33, 46982),

Gene: LilMoolah_78 Start: 48539, Stop: 48874, Start Num: 20
Candidate Starts for LilMoolah_78:
(Start: 20 @48539 has 10 MA's), (26, 48614), (27, 48620), (30, 48689), (31, 48695), (32, 48827),

Gene: LittleShirley_86 Start: 49468, Stop: 49797, Start Num: 20
Candidate Starts for LittleShirley_86:
(Start: 20 @49468 has 10 MA's), (26, 49543), (27, 49549), (30, 49618), (31, 49624), (32, 49756),

Gene: Maru_52 Start: 47257, Stop: 46910, Start Num: 15
Candidate Starts for Maru_52:
(Start: 15 @47257 has 5 MA's), (17, 47245), (29, 47125), (30, 47089), (31, 47083), (32, 46951), (33, 46933),

Gene: Mopey_86 Start: 59779, Stop: 60174, Start Num: 14
Candidate Starts for Mopey_86:
(5, 59656), (Start: 14 @59779 has 12 MA's), (23, 59854), (28, 59926), (29, 59959), (30, 59995), (31, 60001), (32, 60133), (33, 60151),

Gene: Nivrat_76 Start: 48412, Stop: 48747, Start Num: 20
Candidate Starts for Nivrat_76:
(Start: 20 @48412 has 10 MA's), (26, 48487), (27, 48493), (30, 48562), (31, 48568), (32, 48700),

Gene: Olivio_50 Start: 45330, Stop: 45019, Start Num: 19
Candidate Starts for Olivio_50:
(7, 45462), (9, 45450), (19, 45330), (24, 45300), (29, 45240), (30, 45204), (31, 45198), (32, 45066),

Gene: PLOt_85 Start: 59930, Stop: 60325, Start Num: 14
Candidate Starts for PLOt_85:
(5, 59807), (Start: 14 @59930 has 12 MA's), (23, 60005), (28, 60077), (29, 60110), (30, 60146), (31, 60152), (32, 60284), (33, 60302),

Gene: Penelope2018_84 Start: 59705, Stop: 60100, Start Num: 14
Candidate Starts for Penelope2018_84:
(5, 59582), (Start: 14 @59705 has 12 MA's), (23, 59780), (28, 59852), (29, 59885), (30, 59921), (31, 59927), (32, 60059), (33, 60077),

Gene: Peridot_84 Start: 49183, Stop: 49512, Start Num: 20
Candidate Starts for Peridot_84:
(Start: 20 @49183 has 10 MA's), (26, 49258), (27, 49264), (30, 49333), (31, 49339), (32, 49471),

Gene: PhilipPhlop_81 Start: 52533, Stop: 52862, Start Num: 20
Candidate Starts for PhilipPhlop_81:
(Start: 20 @52533 has 10 MA's), (26, 52608), (27, 52614), (30, 52683), (31, 52689), (32, 52821),

Gene: Pollywog_86 Start: 51074, Stop: 51427, Start Num: 15
Candidate Starts for Pollywog_86:
(1, 50873), (10, 51017), (11, 51020), (Start: 15 @51074 has 5 MA's), (17, 51086), (29, 51206), (30, 51242), (31, 51248), (32, 51380),

Gene: Prager_84 Start: 59610, Stop: 60005, Start Num: 14

Candidate Starts for Prager_84:

(5, 59487), (Start: 14 @59610 has 12 MA's), (23, 59685), (28, 59757), (29, 59790), (30, 59826), (31, 59832), (32, 59964), (33, 59982),

Gene: ProMouse_60 Start: 41014, Stop: 40655, Start Num: 22

Candidate Starts for ProMouse_60:

(1, 41281), (10, 41137), (11, 41134), (Start: 15 @41080 has 5 MA's), (22, 41014), (29, 40870), (30, 40834), (31, 40828), (32, 40696), (33, 40678),

Gene: Robyn_52 Start: 47008, Stop: 46682, Start Num: 21

Candidate Starts for Robyn_52:

(8, 47167), (12, 47110), (Start: 16 @47062 has 1 MA's), (18, 47056), (Start: 21 @47008 has 1 MA's), (26, 46939), (27, 46933), (30, 46852), (31, 46846), (32, 46714),

Gene: Starcevich_80 Start: 49749, Stop: 50078, Start Num: 20

Candidate Starts for Starcevich_80:

(Start: 20 @49749 has 10 MA's), (26, 49824), (27, 49830), (30, 49899), (31, 49905), (32, 50037),

Gene: Thoth_84 Start: 59759, Stop: 60154, Start Num: 14

Candidate Starts for Thoth_84:

(5, 59636), (Start: 14 @59759 has 12 MA's), (23, 59834), (28, 59906), (29, 59939), (30, 59975), (31, 59981), (32, 60113), (33, 60131),

Gene: Totinger_82 Start: 48545, Stop: 48874, Start Num: 20

Candidate Starts for Totinger_82:

(Start: 20 @48545 has 10 MA's), (26, 48620), (27, 48626), (30, 48695), (31, 48701), (32, 48833),

Gene: Violac_81 Start: 49810, Stop: 50139, Start Num: 20

Candidate Starts for Violac_81:

(Start: 20 @49810 has 10 MA's), (25, 49846), (30, 49960), (31, 49966), (32, 50098),

Gene: Visconti_85 Start: 59720, Stop: 60115, Start Num: 14

Candidate Starts for Visconti_85:

(5, 59597), (Start: 14 @59720 has 12 MA's), (23, 59795), (28, 59867), (29, 59900), (30, 59936), (31, 59942), (32, 60074), (33, 60092),

Gene: Vivum_82 Start: 50435, Stop: 50764, Start Num: 20

Candidate Starts for Vivum_82:

(Start: 20 @50435 has 10 MA's), (26, 50510), (27, 50516), (30, 50585), (31, 50591), (32, 50723),

Gene: WaldoWhy_85 Start: 59683, Stop: 60078, Start Num: 14

Candidate Starts for WaldoWhy_85:

(5, 59560), (Start: 14 @59683 has 12 MA's), (23, 59758), (28, 59830), (29, 59863), (30, 59899), (31, 59905), (32, 60037), (33, 60055),