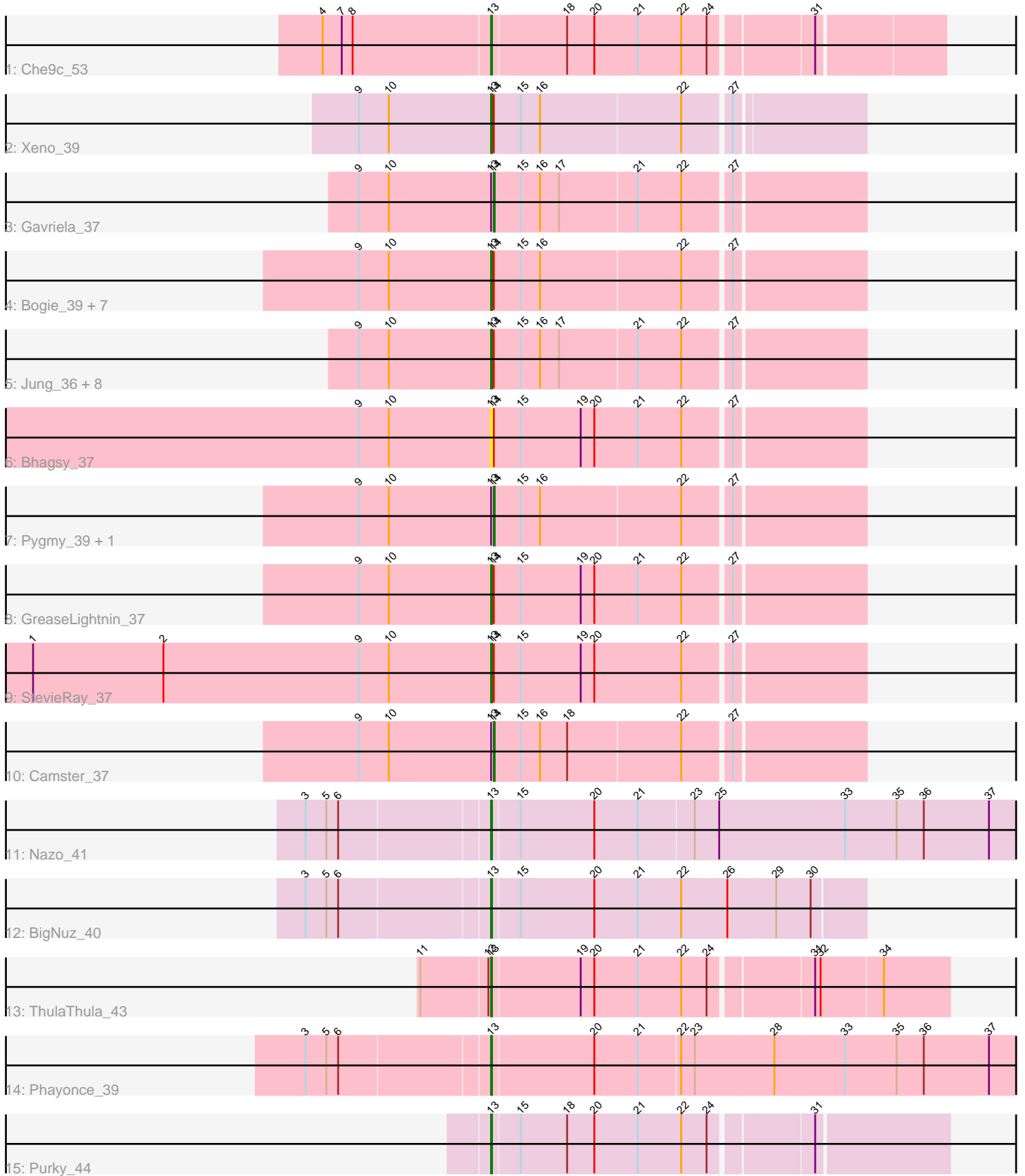


Pham 224786



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 224786 Report

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

Pham number 224786 has 31 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Che9c_53
- Track 2 : Xeno_39
- Track 3 : Gavriela_37
- Track 4 : Bogie_39, Brusacoram_37, Bunnies_37, Ksquared_37, Malithi_37, Thespis_37, Atcoo_37, Shipwreck_39
- Track 5 : Jung_36, KilKor_37, Polkaroo_37, Phalm_37, Megiddo_37, Glaske_37, Willsammy_36, StressBall_37, CactusJack_37
- Track 6 : Bhagsy_37
- Track 7 : Pygmy_39, Juniormint_37
- Track 8 : GreaseLightnin_37
- Track 9 : StevieRay_37
- Track 10 : Camster_37
- Track 11 : Nazo_41
- Track 12 : BigNuz_40
- Track 13 : ThulaThula_43
- Track 14 : Phayonce_39
- Track 15 : Purky_44

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

The start number called the most often in the published annotations is 13, it was called in 25 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atcoo_37, Bhagsy_37, BigNuz_40, Bogie_39, Brusacoram_37, Bunnies_37, CactusJack_37, Che9c_53, Glaske_37, GreaseLightnin_37, Jung_36, KilKor_37, Ksquared_37, Malithi_37, Megiddo_37, Nazo_41, Phalm_37, Phayonce_39, Polkaroo_37, Purky_44, Shipwreck_39, StevieRay_37, StressBall_37, Thespis_37, ThulaThula_43, Willsammy_36, Xeno_39,

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

- Camster_37, Gavriela_37, Juniormint_37, Pygmy_39,

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

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Summary by start number:

Start 13:

- Found in 31 of 31 (100.0%) of genes in pham
- Manual Annotations of this start: 25 of 29
- Called 87.1% of time when present
- Phage (with cluster) where this start called: Atcoo_37 (P1), Bhagsy_37 (P1), BigNuz_40 (P4), Bogie_39 (P1), Brusacoram_37 (P1), Bunnies_37 (P1), CactusJack_37 (P1), Che9c_53 (I2), Glaske_37 (P1), GreaseLightnin_37 (P1), Jung_36 (P1), KilKor_37 (P1), Ksquared_37 (P1), Malithi_37 (P1), Megiddo_37 (P1), Nazo_41 (P4), Phalm_37 (P1), Phayonce_39 (P5), Polkaroo_37 (P1), Purky_44 (P6), Shipwreck_39 (P1), StevieRay_37 (P1), StressBall_37 (P1), Thespis_37 (P1), ThulaThula_43 (P5), Willsammy_36 (P1), Xeno_39 (N),

Start 14:

- Found in 25 of 31 (80.6%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 16.0% of time when present
- Phage (with cluster) where this start called: Camster_37 (P1), Gavriela_37 (P1), Juniormint_37 (P1), Pygmy_39 (P1),

Summary by clusters:

There are 6 clusters represented in this pham: P1, P6, P4, P5, I2, N,

Info for manual annotations of cluster I2:

- Start number 13 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 13 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

- Start number 13 was manually annotated 18 times for cluster P1.
- Start number 14 was manually annotated 4 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 13 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 13 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 13 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Atcoo_37 Start: 29830, Stop: 30222, Start Num: 13

Candidate Starts for Atcoo_37:

(9, 29686), (10, 29719), (Start: 13 @29830 has 25 MA's), (Start: 14 @29833 has 4 MA's), (15, 29863), (16, 29884), (22, 30037), (27, 30085),

Gene: Bhagsy_37 Start: 29336, Stop: 29734, Start Num: 13

Candidate Starts for Bhagsy_37:

(9, 29192), (10, 29225), (Start: 13 @29336 has 25 MA's), (Start: 14 @29339 has 4 MA's), (15, 29369), (19, 29435), (20, 29450), (21, 29498), (22, 29546), (27, 29594),

Gene: BigNuz_40 Start: 31449, Stop: 31847, Start Num: 13

Candidate Starts for BigNuz_40:

(3, 31257), (5, 31278), (6, 31290), (Start: 13 @31449 has 25 MA's), (15, 31479), (20, 31560), (21, 31608), (22, 31656), (26, 31704), (29, 31755), (30, 31791),

Gene: Bogie_39 Start: 31126, Stop: 31521, Start Num: 13

Candidate Starts for Bogie_39:

(9, 30982), (10, 31015), (Start: 13 @31126 has 25 MA's), (Start: 14 @31129 has 4 MA's), (15, 31159), (16, 31180), (22, 31333), (27, 31381),

Gene: Brusacoram_37 Start: 29336, Stop: 29728, Start Num: 13

Candidate Starts for Brusacoram_37:

(9, 29192), (10, 29225), (Start: 13 @29336 has 25 MA's), (Start: 14 @29339 has 4 MA's), (15, 29369), (16, 29390), (22, 29543), (27, 29591),

Gene: Bunnies_37 Start: 29357, Stop: 29752, Start Num: 13

Candidate Starts for Bunnies_37:

(9, 29213), (10, 29246), (Start: 13 @29357 has 25 MA's), (Start: 14 @29360 has 4 MA's), (15, 29390), (16, 29411), (22, 29564), (27, 29612),

Gene: CactusJack_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for CactusJack_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Camster_37 Start: 29376, Stop: 29768, Start Num: 14

Candidate Starts for Camster_37:

(9, 29229), (10, 29262), (Start: 13 @29373 has 25 MA's), (Start: 14 @29376 has 4 MA's), (15, 29406), (16, 29427), (18, 29457), (22, 29580), (27, 29628),

Gene: Che9c_53 Start: 40661, Stop: 41131, Start Num: 13

Candidate Starts for Che9c_53:

(4, 40478), (7, 40499), (8, 40511), (Start: 13 @40661 has 25 MA's), (18, 40742), (20, 40772), (21, 40820), (22, 40868), (24, 40895), (31, 40997),

Gene: Gavriela_37 Start: 29600, Stop: 29992, Start Num: 14

Candidate Starts for Gavriela_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Glaske_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Glaske_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: GreaseLightnin_37 Start: 29583, Stop: 29981, Start Num: 13

Candidate Starts for GreaseLightnin_37:

(9, 29439), (10, 29472), (Start: 13 @29583 has 25 MA's), (Start: 14 @29586 has 4 MA's), (15, 29616), (19, 29682), (20, 29697), (21, 29745), (22, 29793), (27, 29841),

Gene: Jung_36 Start: 29304, Stop: 29699, Start Num: 13

Candidate Starts for Jung_36:

(9, 29160), (10, 29193), (Start: 13 @29304 has 25 MA's), (Start: 14 @29307 has 4 MA's), (15, 29337), (16, 29358), (17, 29379), (21, 29463), (22, 29511), (27, 29559),

Gene: Juniormint_37 Start: 29382, Stop: 29774, Start Num: 14

Candidate Starts for Juniormint_37:

(9, 29235), (10, 29268), (Start: 13 @29379 has 25 MA's), (Start: 14 @29382 has 4 MA's), (15, 29412), (16, 29433), (22, 29586), (27, 29634),

Gene: KilKor_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for KilKor_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Ksquared_37 Start: 29357, Stop: 29752, Start Num: 13

Candidate Starts for Ksquared_37:

(9, 29213), (10, 29246), (Start: 13 @29357 has 25 MA's), (Start: 14 @29360 has 4 MA's), (15, 29390), (16, 29411), (22, 29564), (27, 29612),

Gene: Malithi_37 Start: 29266, Stop: 29661, Start Num: 13

Candidate Starts for Malithi_37:

(9, 29122), (10, 29155), (Start: 13 @29266 has 25 MA's), (Start: 14 @29269 has 4 MA's), (15, 29299), (16, 29320), (22, 29473), (27, 29521),

Gene: Megiddo_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Megiddo_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Nazo_41 Start: 31451, Stop: 32053, Start Num: 13

Candidate Starts for Nazo_41:

(3, 31259), (5, 31280), (6, 31292), (Start: 13 @31451 has 25 MA's), (15, 31481), (20, 31562), (21, 31610), (23, 31670), (25, 31697), (33, 31832), (35, 31889), (36, 31919), (37, 31991),

Gene: Phalm_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Phalm_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Phayonce_39 Start: 31362, Stop: 31964, Start Num: 13

Candidate Starts for Phayonce_39:

(3, 31170), (5, 31191), (6, 31203), (Start: 13 @31362 has 25 MA's), (20, 31473), (21, 31521), (22, 31566), (23, 31581), (28, 31668), (33, 31743), (35, 31800), (36, 31830), (37, 31902),

Gene: Polkaroo_37 Start: 29354, Stop: 29749, Start Num: 13

Candidate Starts for Polkaroo_37:

(9, 29210), (10, 29243), (Start: 13 @29354 has 25 MA's), (Start: 14 @29357 has 4 MA's), (15, 29387), (16, 29408), (17, 29429), (21, 29513), (22, 29561), (27, 29609),

Gene: Purky_44 Start: 32059, Stop: 32535, Start Num: 13

Candidate Starts for Purky_44:

(Start: 13 @32059 has 25 MA's), (15, 32089), (18, 32140), (20, 32170), (21, 32218), (22, 32266), (24, 32293), (31, 32395),

Gene: Pygmy_39 Start: 31185, Stop: 31577, Start Num: 14

Candidate Starts for Pygmy_39:

(9, 31038), (10, 31071), (Start: 13 @31182 has 25 MA's), (Start: 14 @31185 has 4 MA's), (15, 31215), (16, 31236), (22, 31389), (27, 31437),

Gene: Shipwreck_39 Start: 31157, Stop: 31552, Start Num: 13

Candidate Starts for Shipwreck_39:

(9, 31013), (10, 31046), (Start: 13 @31157 has 25 MA's), (Start: 14 @31160 has 4 MA's), (15, 31190), (16, 31211), (22, 31364), (27, 31412),

Gene: StevieRay_37 Start: 29296, Stop: 29694, Start Num: 13

Candidate Starts for StevieRay_37:

(1, 28792), (2, 28936), (9, 29152), (10, 29185), (Start: 13 @29296 has 25 MA's), (Start: 14 @29299 has 4 MA's), (15, 29329), (19, 29395), (20, 29410), (22, 29506), (27, 29554),

Gene: StressBall_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for StressBall_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 25 MA's), (Start: 14 @29600 has 4 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (27, 29852),

Gene: Thespis_37 Start: 29336, Stop: 29728, Start Num: 13

Candidate Starts for Thespis_37:

(9, 29192), (10, 29225), (Start: 13 @29336 has 25 MA's), (Start: 14 @29339 has 4 MA's), (15, 29369), (16, 29390), (22, 29543), (27, 29591),

Gene: ThulaThula_43 Start: 33482, Stop: 33961, Start Num: 13

Candidate Starts for ThulaThula_43:

(11, 33407), (12, 33479), (Start: 13 @33482 has 25 MA's), (19, 33578), (20, 33593), (21, 33641), (22, 33689), (24, 33716), (31, 33818), (32, 33824), (34, 33890),

Gene: Willsammy_36 Start: 29080, Stop: 29475, Start Num: 13

Candidate Starts for Willsammy_36:

(9, 28936), (10, 28969), (Start: 13 @29080 has 25 MA's), (Start: 14 @29083 has 4 MA's), (15, 29113), (16, 29134), (17, 29155), (21, 29239), (22, 29287), (27, 29335),

Gene: Xeno_39 Start: 28678, Stop: 29070, Start Num: 13

Candidate Starts for Xeno_39:

(9, 28534), (10, 28567), (Start: 13 @28678 has 25 MA's), (Start: 14 @28681 has 4 MA's), (15, 28711), (16, 28732), (22, 28885), (27, 28933),