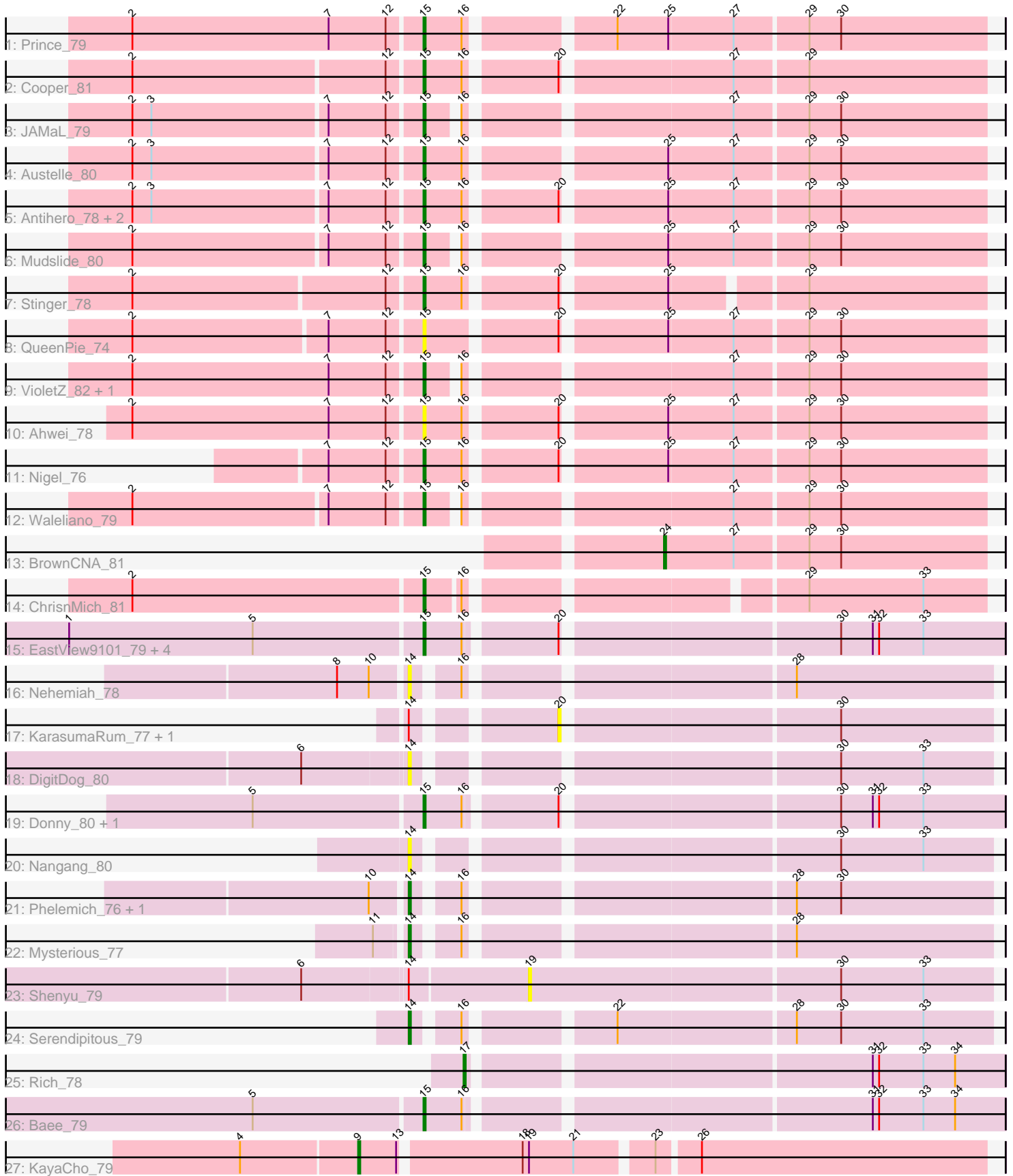


Pham 303522



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 303522 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303522 has 37 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Prince\_79
- Track 2 : Cooper\_81
- Track 3 : JAMaL\_79
- Track 4 : Austelle\_80
- Track 5 : Antihero\_78, GinPorsche\_80, Epah\_78
- Track 6 : Mudslide\_80
- Track 7 : Stinger\_78
- Track 8 : QueenPie\_74
- Track 9 : VioletZ\_82, Magpie\_77
- Track 10 : Ahwei\_78
- Track 11 : Nigel\_76
- Track 12 : Waleliano\_79
- Track 13 : BrownCNA\_81
- Track 14 : ChrisnMich\_81
- Track 15 : EastView9101\_79, Reccee\_81, Acadian\_80, Suigeneris\_81, Rita130\_79
- Track 16 : Nehemiah\_78
- Track 17 : KarasumaRum\_77, StinkyVeggy\_77
- Track 18 : DigitDog\_80
- Track 19 : Donny\_80, SirJeffery\_78
- Track 20 : Nangang\_80
- Track 21 : Phelemich\_76, Reprobate\_78
- Track 22 : Mysterious\_77
- Track 23 : Shenyu\_79
- Track 24 : Serendipitous\_79
- Track 25 : Rich\_78
- Track 26 : Bae\_79
- Track 27 : KayaCho\_79

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

The start number called the most often in the published annotations is 15, it was called in 18 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acadian\_80, Ahwei\_78, Antihero\_78, Austelle\_80, Bae\_79, ChrisnMich\_81, Cooper\_81, Donny\_80, EastView9101\_79, Epah\_78, GinPorsche\_80, JAMaL\_79, Magpie\_77, Mudslide\_80, Nigel\_76, Prince\_79, QueenPie\_74, Reccee\_81, Rita130\_79, SirJeffery\_78, Stinger\_78, Suigeneris\_81, VioletZ\_82, Waleliano\_79,

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

- 

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

- BrownCNA\_81, DigitDog\_80, KarasumaRum\_77, KayaCho\_79, Mysterious\_77, Nangang\_80, Nehemiah\_78, Phelemich\_76, Reprobate\_78, Rich\_78, Serendipitous\_79, Shenyu\_79, StinkyVeggy\_77,

### Summary by start number:

Start 9:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KayaCho\_79 (B6),

Start 14:

- Found in 10 of 37 ( 27.0% ) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 70.0% of time when present
- Phage (with cluster) where this start called: DigitDog\_80 (B5), Mysterious\_77 (B5), Nangang\_80 (B5), Nehemiah\_78 (B5), Phelemich\_76 (B5), Reprobate\_78 (B5), Serendipitous\_79 (B5),

Start 15:

- Found in 24 of 37 ( 64.9% ) of genes in pham
- Manual Annotations of this start: 18 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian\_80 (B5), Ahwei\_78 (B4), Antihero\_78 (B4), Austelle\_80 (B4), Bae\_79 (B5), ChrisnMich\_81 (B4), Cooper\_81 (B4), Donny\_80 (B5), EastView9101\_79 (B5), Epah\_78 (B4), GinPorsche\_80 (B4), JAMaL\_79 (B4), Magpie\_77 (B4), Mudslide\_80 (B4), Nigel\_76 (B4), Prince\_79 (B4), QueenPie\_74 (B4), Reccee\_81 (B5), Rita130\_79 (B5), SirJeffery\_78 (B5), Stinger\_78 (B4), Suigeneris\_81 (B5), VioletZ\_82 (B4), Waleliano\_79 (B4),

Start 17:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rich\_78 (B5),

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: Shenyu\_79 (B5),

Start 20:

- Found in 17 of 37 ( 45.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 11.8% of time when present
- Phage (with cluster) where this start called: KarasumaRum\_77 (B5), StinkyVeggy\_77 (B5),

Start 24:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrownCNA\_81 (B4),

### **Summary by clusters:**

There are 3 clusters represented in this pham: B4, B5, B6,

Info for manual annotations of cluster B4:

- Start number 15 was manually annotated 12 times for cluster B4.
- Start number 24 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 14 was manually annotated 4 times for cluster B5.
- Start number 15 was manually annotated 6 times for cluster B5.
- Start number 17 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster B6:

- Start number 9 was manually annotated 1 time for cluster B6.

### **Gene Information:**

Gene: Acadian\_80 Start: 62958, Stop: 62701, Start Num: 15

Candidate Starts for Acadian\_80:

(1, 63123), (5, 63036), (Start: 15 @62958 has 18 MA's), (16, 62940), (20, 62901), (30, 62778), (31, 62763), (32, 62760), (33, 62739),

Gene: Ahwei\_78 Start: 63247, Stop: 62999, Start Num: 15

Candidate Starts for Ahwei\_78:

(2, 63382), (7, 63289), (12, 63262), (Start: 15 @63247 has 18 MA's), (16, 63229), (20, 63190), (25, 63145), (27, 63115), (29, 63082), (30, 63067),

Gene: Antihero\_78 Start: 63182, Stop: 62934, Start Num: 15

Candidate Starts for Antihero\_78:

(2, 63314), (3, 63305), (7, 63224), (12, 63197), (Start: 15 @63182 has 18 MA's), (16, 63164), (20, 63125), (25, 63080), (27, 63050), (29, 63017), (30, 63002),

Gene: Austelle\_80 Start: 64860, Stop: 64612, Start Num: 15

Candidate Starts for Austelle\_80:

(2, 64992), (3, 64983), (7, 64902), (12, 64875), (Start: 15 @64860 has 18 MA's), (16, 64842), (25, 64758), (27, 64728), (29, 64695), (30, 64680),

Gene: Baee\_79 Start: 63594, Stop: 63337, Start Num: 15

Candidate Starts for Bae\_79:

(5, 63672), (Start: 15 @63594 has 18 MA's), (16, 63576), (31, 63399), (32, 63396), (33, 63375), (34, 63360),

Gene: BrownCNA\_81 Start: 64179, Stop: 64030, Start Num: 24

Candidate Starts for BrownCNA\_81:

(Start: 24 @64179 has 1 MA's), (27, 64146), (29, 64113), (30, 64098),

Gene: ChrisnMich\_81 Start: 63195, Stop: 62956, Start Num: 15

Candidate Starts for ChrisnMich\_81:

(2, 63330), (Start: 15 @63195 has 18 MA's), (16, 63180), (29, 63039), (33, 62985),

Gene: Cooper\_81 Start: 63632, Stop: 63384, Start Num: 15

Candidate Starts for Cooper\_81:

(2, 63764), (12, 63647), (Start: 15 @63632 has 18 MA's), (16, 63614), (20, 63575), (27, 63500), (29, 63467),

Gene: DigitDog\_80 Start: 63071, Stop: 62820, Start Num: 14

Candidate Starts for DigitDog\_80:

(6, 63119), (Start: 14 @63071 has 4 MA's), (30, 62891), (33, 62852),

Gene: Donny\_80 Start: 62792, Stop: 62535, Start Num: 15

Candidate Starts for Donny\_80:

(5, 62870), (Start: 15 @62792 has 18 MA's), (16, 62774), (20, 62735), (30, 62612), (31, 62597), (32, 62594), (33, 62573),

Gene: EastView9101\_79 Start: 62702, Stop: 62445, Start Num: 15

Candidate Starts for EastView9101\_79:

(1, 62867), (5, 62780), (Start: 15 @62702 has 18 MA's), (16, 62684), (20, 62645), (30, 62522), (31, 62507), (32, 62504), (33, 62483),

Gene: Epah\_78 Start: 63182, Stop: 62934, Start Num: 15

Candidate Starts for Epah\_78:

(2, 63314), (3, 63305), (7, 63224), (12, 63197), (Start: 15 @63182 has 18 MA's), (16, 63164), (20, 63125), (25, 63080), (27, 63050), (29, 63017), (30, 63002),

Gene: GinPorsche\_80 Start: 63179, Stop: 62931, Start Num: 15

Candidate Starts for GinPorsche\_80:

(2, 63311), (3, 63302), (7, 63221), (12, 63194), (Start: 15 @63179 has 18 MA's), (16, 63161), (20, 63122), (25, 63077), (27, 63047), (29, 63014), (30, 62999),

Gene: JAMaL\_79 Start: 63728, Stop: 63486, Start Num: 15

Candidate Starts for JAMaL\_79:

(2, 63860), (3, 63851), (7, 63770), (12, 63743), (Start: 15 @63728 has 18 MA's), (16, 63716), (27, 63602), (29, 63569), (30, 63554),

Gene: KarasumaRum\_77 Start: 62535, Stop: 62341, Start Num: 20

Candidate Starts for KarasumaRum\_77:

(Start: 14 @62592 has 4 MA's), (20, 62535), (30, 62412),

Gene: KayaCho\_79 Start: 63200, Stop: 62919, Start Num: 9

Candidate Starts for KayaCho\_79:

(4, 63254), (Start: 9 @63200 has 1 MA's), (13, 63182), (18, 63128), (19, 63125), (21, 63104), (23, 63071), (26, 63053),

Gene: Magpie\_77 Start: 63847, Stop: 63605, Start Num: 15

Candidate Starts for Magpie\_77:

(2, 63982), (7, 63889), (12, 63862), (Start: 15 @63847 has 18 MA's), (16, 63835), (27, 63721), (29, 63688), (30, 63673),

Gene: Mudslide\_80 Start: 64394, Stop: 64152, Start Num: 15

Candidate Starts for Mudslide\_80:

(2, 64526), (7, 64436), (12, 64409), (Start: 15 @64394 has 18 MA's), (16, 64382), (25, 64298), (27, 64268), (29, 64235), (30, 64220),

Gene: Mysterious\_77 Start: 62618, Stop: 62367, Start Num: 14

Candidate Starts for Mysterious\_77:

(11, 62630), (Start: 14 @62618 has 4 MA's), (16, 62600), (28, 62459),

Gene: Nangang\_80 Start: 63283, Stop: 63032, Start Num: 14

Candidate Starts for Nangang\_80:

(Start: 14 @63283 has 4 MA's), (30, 63103), (33, 63064),

Gene: Nehemiah\_78 Start: 62675, Stop: 62424, Start Num: 14

Candidate Starts for Nehemiah\_78:

(8, 62705), (10, 62690), (Start: 14 @62675 has 4 MA's), (16, 62657), (28, 62516),

Gene: Nigel\_76 Start: 62547, Stop: 62299, Start Num: 15

Candidate Starts for Nigel\_76:

(7, 62589), (12, 62562), (Start: 15 @62547 has 18 MA's), (16, 62529), (20, 62490), (25, 62445), (27, 62415), (29, 62382), (30, 62367),

Gene: Phelemich\_76 Start: 62744, Stop: 62493, Start Num: 14

Candidate Starts for Phelemich\_76:

(10, 62759), (Start: 14 @62744 has 4 MA's), (16, 62726), (28, 62585), (30, 62564),

Gene: Prince\_79 Start: 64261, Stop: 64013, Start Num: 15

Candidate Starts for Prince\_79:

(2, 64396), (7, 64303), (12, 64276), (Start: 15 @64261 has 18 MA's), (16, 64243), (22, 64183), (25, 64159), (27, 64129), (29, 64096), (30, 64081),

Gene: QueenPie\_74 Start: 62927, Stop: 62679, Start Num: 15

Candidate Starts for QueenPie\_74:

(2, 63059), (7, 62969), (12, 62942), (Start: 15 @62927 has 18 MA's), (20, 62870), (25, 62825), (27, 62795), (29, 62762), (30, 62747),

Gene: Reccee\_81 Start: 63262, Stop: 63005, Start Num: 15

Candidate Starts for Reccee\_81:

(1, 63427), (5, 63340), (Start: 15 @63262 has 18 MA's), (16, 63244), (20, 63205), (30, 63082), (31, 63067), (32, 63064), (33, 63043),

Gene: Reprobate\_78 Start: 62749, Stop: 62498, Start Num: 14

Candidate Starts for Reprobate\_78:

(10, 62764), (Start: 14 @62749 has 4 MA's), (16, 62731), (28, 62590), (30, 62569),

Gene: Rich\_78 Start: 63621, Stop: 63382, Start Num: 17

Candidate Starts for Rich\_78:

(Start: 17 @63621 has 1 MA's), (31, 63444), (32, 63441), (33, 63420), (34, 63405),

Gene: Rita130\_79 Start: 62932, Stop: 62675, Start Num: 15

Candidate Starts for Rita130\_79:

(1, 63097), (5, 63010), (Start: 15 @62932 has 18 MA's), (16, 62914), (20, 62875), (30, 62752), (31, 62737), (32, 62734), (33, 62713),

Gene: Serendipitous\_79 Start: 62642, Stop: 62391, Start Num: 14

Candidate Starts for Serendipitous\_79:

(Start: 14 @62642 has 4 MA's), (16, 62624), (22, 62564), (28, 62483), (30, 62462), (33, 62423),

Gene: Shenyu\_79 Start: 63027, Stop: 62812, Start Num: 19

Candidate Starts for Shenyu\_79:

(6, 63129), (Start: 14 @63081 has 4 MA's), (19, 63027), (30, 62883), (33, 62844),

Gene: SirJeffery\_78 Start: 62742, Stop: 62485, Start Num: 15

Candidate Starts for SirJeffery\_78:

(5, 62820), (Start: 15 @62742 has 18 MA's), (16, 62724), (20, 62685), (30, 62562), (31, 62547), (32, 62544), (33, 62523),

Gene: Stinger\_78 Start: 62665, Stop: 62423, Start Num: 15

Candidate Starts for Stinger\_78:

(2, 62797), (12, 62680), (Start: 15 @62665 has 18 MA's), (16, 62647), (20, 62608), (25, 62563), (29, 62506),

Gene: StinkyVeggy\_77 Start: 62535, Stop: 62341, Start Num: 20

Candidate Starts for StinkyVeggy\_77:

(Start: 14 @62592 has 4 MA's), (20, 62535), (30, 62412),

Gene: Suigeneris\_81 Start: 63180, Stop: 62923, Start Num: 15

Candidate Starts for Suigeneris\_81:

(1, 63345), (5, 63258), (Start: 15 @63180 has 18 MA's), (16, 63162), (20, 63123), (30, 63000), (31, 62985), (32, 62982), (33, 62961),

Gene: VioletZ\_82 Start: 64351, Stop: 64109, Start Num: 15

Candidate Starts for VioletZ\_82:

(2, 64486), (7, 64393), (12, 64366), (Start: 15 @64351 has 18 MA's), (16, 64339), (27, 64225), (29, 64192), (30, 64177),

Gene: Waleliano\_79 Start: 64025, Stop: 63783, Start Num: 15

Candidate Starts for Waleliano\_79:

(2, 64157), (7, 64067), (12, 64040), (Start: 15 @64025 has 18 MA's), (16, 64013), (27, 63899), (29, 63866), (30, 63851),