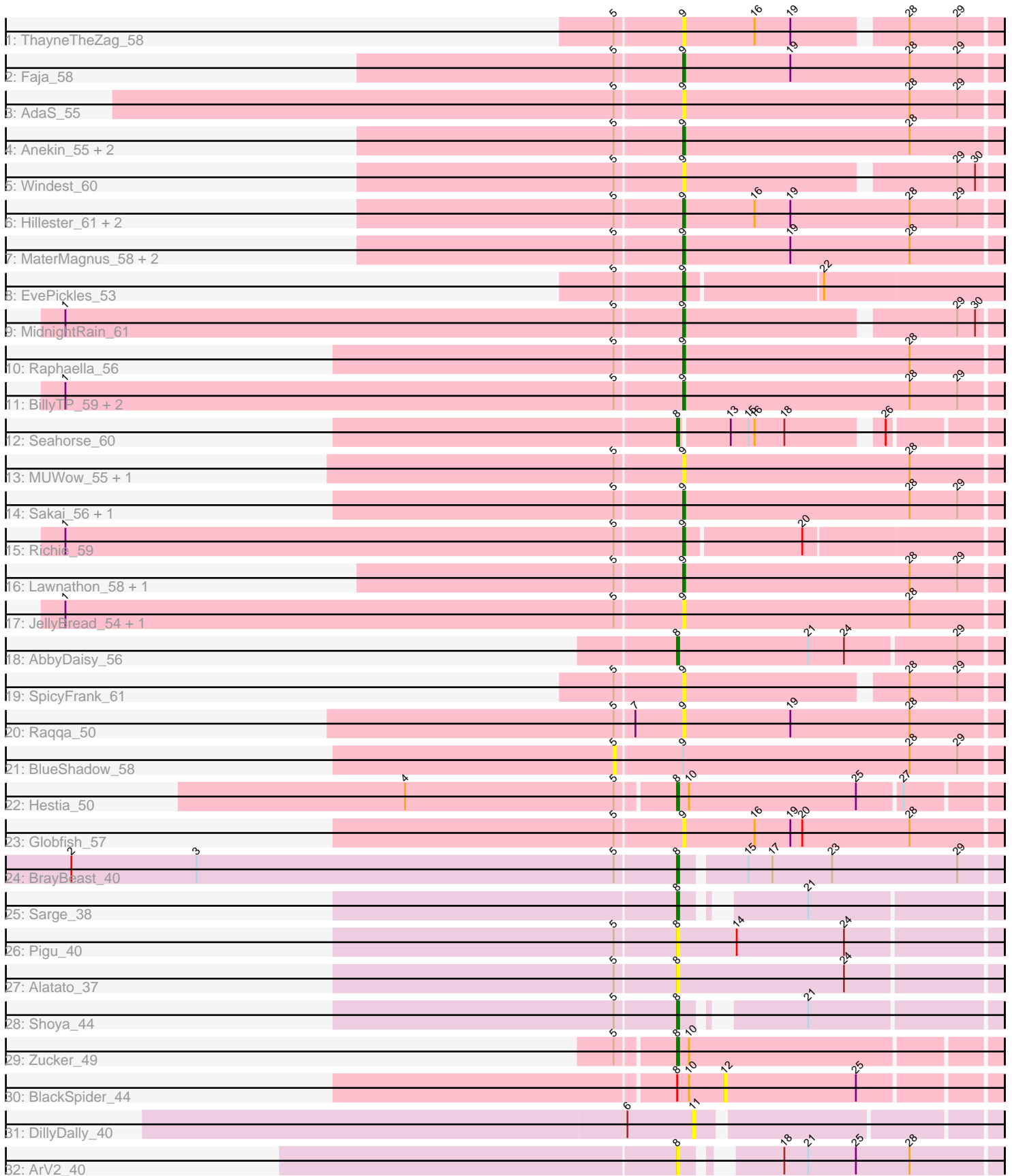


Pham 221542



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 221542 Report

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

Pham number 221542 has 44 members, 22 are drafts.

Phages represented in each track:

- Track 1 : ThayneTheZag\_58
- Track 2 : Faja\_58
- Track 3 : AdaS\_55
- Track 4 : Anekin\_55, BenchScraper\_56, Vopal\_60
- Track 5 : Windest\_60
- Track 6 : Hillester\_61, RadFad\_61, Tiff81\_53
- Track 7 : MaterMagnus\_58, Aikyam\_56, Auxilium\_53
- Track 8 : EvePickles\_53
- Track 9 : MidnightRain\_61
- Track 10 : Raphaella\_56
- Track 11 : BillyTP\_59, Isolde\_56, CookieBear\_57
- Track 12 : Seahorse\_60
- Track 13 : MUWow\_55, Bhageatrice\_60
- Track 14 : Sakai\_56, Gorpy\_57
- Track 15 : Richie\_59
- Track 16 : Lawnathon\_58, Phrank15\_58
- Track 17 : JellyBread\_54, YoungHarleezy\_57
- Track 18 : AbbyDaisy\_56
- Track 19 : SpicyFrank\_61
- Track 20 : Raqqa\_50
- Track 21 : BlueShadow\_58
- Track 22 : Hestia\_50
- Track 23 : Globfish\_57
- Track 24 : BrayBeast\_40
- Track 25 : Sarge\_38
- Track 26 : Pigu\_40
- Track 27 : Alatato\_37
- Track 28 : Shoya\_44
- Track 29 : Zucker\_49
- Track 30 : BlackSpider\_44
- Track 31 : DillyDally\_40
- Track 32 : ArV2\_40

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

The start number called the most often in the published annotations is 9, it was called in 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS\_55, Aikyam\_56, Anekin\_55, Auxilium\_53, BenchScraper\_56, Bhageatrice\_60, BillyTP\_59, CookieBear\_57, EvePickles\_53, Faja\_58, Globfish\_57, Gorpy\_57, Hillester\_61, Isolde\_56, JellyBread\_54, Lawnathon\_58, MUWow\_55, MaterMagnus\_58, MidnightRain\_61, Phrank15\_58, RadFad\_61, Raphaella\_56, Raqqa\_50, Richie\_59, Sakai\_56, SpicyFrank\_61, ThayneTheZag\_58, Tiff81\_53, Vopal\_60, Windest\_60, YoungHarleezy\_57,

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

- BlueShadow\_58,

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

- AbbyDaisy\_56, Alatato\_37, ArV2\_40, BlackSpider\_44, BrayBeast\_40, DillyDally\_40, Hestia\_50, Pigu\_40, Sarge\_38, Seahorse\_60, Shoya\_44, Zucker\_49,

### Summary by start number:

Start 5:

- Found in 38 of 44 ( 86.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.6% of time when present
- Phage (with cluster) where this start called: BlueShadow\_58 (AY),

Start 8:

- Found in 11 of 44 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 7 of 22
- Called 90.9% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_56 (AY), Alatato\_37 (FB), ArV2\_40 (singleton), BrayBeast\_40 (FB), Hestia\_50 (AY), Pigu\_40 (FB), Sarge\_38 (FB), Seahorse\_60 (AY), Shoya\_44 (FB), Zucker\_49 (FN),

Start 9:

- Found in 32 of 44 ( 72.7% ) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 96.9% of time when present
- Phage (with cluster) where this start called: AdaS\_55 (AY), Aikyam\_56 (AY), Anekin\_55 (AY), Auxilium\_53 (AY), BenchScraper\_56 (AY), Bhageatrice\_60 (AY), BillyTP\_59 (AY), CookieBear\_57 (AY), EvePickles\_53 (AY), Faja\_58 (AY), Globfish\_57 (AY), Gorpy\_57 (AY), Hillester\_61 (AY), Isolde\_56 (AY), JellyBread\_54 (AY), Lawnathon\_58 (AY), MUWow\_55 (AY), MaterMagnus\_58 (AY), MidnightRain\_61 (AY), Phrank15\_58 (AY), RadFad\_61 (AY), Raphaella\_56 (AY), Raqqa\_50 (AY), Richie\_59 (AY), Sakai\_56 (AY), SpicyFrank\_61 (AY), ThayneTheZag\_58 (AY), Tiff81\_53 (AY), Vopal\_60 (AY), Windest\_60 (AY), YoungHarleezy\_57 (AY),

Start 11:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: DillyDally\_40 (singleton),

Start 12:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackSpider\_44 (FN),

### **Summary by clusters:**

There are 4 clusters represented in this pham: AY, FB, singleton, FN,

Info for manual annotations of cluster AY:

- Start number 8 was manually annotated 3 times for cluster AY.
- Start number 9 was manually annotated 15 times for cluster AY.

Info for manual annotations of cluster FB:

- Start number 8 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 8 was manually annotated 1 time for cluster FN.

### **Gene Information:**

Gene: AbbyDaisy\_56 Start: 33760, Stop: 33918, Start Num: 8

Candidate Starts for AbbyDaisy\_56:

(Start: 8 @33760 has 7 MA's), (21, 33826), (24, 33844), (29, 33898),

Gene: AdaS\_55 Start: 31700, Stop: 31858, Start Num: 9

Candidate Starts for AdaS\_55:

(5, 31667), (Start: 9 @31700 has 15 MA's), (28, 31814), (29, 31838),

Gene: Aikyam\_56 Start: 31872, Stop: 32030, Start Num: 9

Candidate Starts for Aikyam\_56:

(5, 31839), (Start: 9 @31872 has 15 MA's), (19, 31926), (28, 31986),

Gene: Alatato\_37 Start: 26513, Stop: 26671, Start Num: 8

Candidate Starts for Alatato\_37:

(5, 26483), (Start: 8 @26513 has 7 MA's), (24, 26597),

Gene: Anekin\_55 Start: 33544, Stop: 33702, Start Num: 9

Candidate Starts for Anekin\_55:

(5, 33511), (Start: 9 @33544 has 15 MA's), (28, 33658),

Gene: ArV2\_40 Start: 25889, Stop: 26032, Start Num: 8

Candidate Starts for ArV2\_40:

(Start: 8 @25889 has 7 MA's), (18, 25925), (21, 25937), (25, 25961), (28, 25988),

Gene: Auxilium\_53 Start: 31029, Stop: 31187, Start Num: 9

Candidate Starts for Auxilium\_53:

(5, 30996), (Start: 9 @31029 has 15 MA's), (19, 31083), (28, 31143),

Gene: BenchScraper\_56 Start: 33194, Stop: 33352, Start Num: 9

Candidate Starts for BenchScraper\_56:

(5, 33161), (Start: 9 @33194 has 15 MA's), (28, 33308),

Gene: Bhageatrice\_60 Start: 35468, Stop: 35626, Start Num: 9

Candidate Starts for Bhageatrice\_60:

(5, 35435), (Start: 9 @35468 has 15 MA's), (28, 35582),

Gene: BillyTP\_59 Start: 35066, Stop: 35224, Start Num: 9

Candidate Starts for BillyTP\_59:

(1, 34757), (5, 35033), (Start: 9 @35066 has 15 MA's), (28, 35180), (29, 35204),

Gene: BlackSpider\_44 Start: 30207, Stop: 30338, Start Num: 12

Candidate Starts for BlackSpider\_44:

(Start: 8 @30183 has 7 MA's), (10, 30189), (12, 30207), (25, 30273),

Gene: BlueShadow\_58 Start: 33823, Stop: 34014, Start Num: 5

Candidate Starts for BlueShadow\_58:

(5, 33823), (Start: 9 @33856 has 15 MA's), (28, 33970), (29, 33994),

Gene: BrayBeast\_40 Start: 27217, Stop: 27372, Start Num: 8

Candidate Starts for BrayBeast\_40:

(2, 26914), (3, 26977), (5, 27187), (Start: 8 @27217 has 7 MA's), (15, 27247), (17, 27259), (23, 27289), (29, 27352),

Gene: CookieBear\_57 Start: 33450, Stop: 33608, Start Num: 9

Candidate Starts for CookieBear\_57:

(1, 33141), (5, 33417), (Start: 9 @33450 has 15 MA's), (28, 33564), (29, 33588),

Gene: DillyDally\_40 Start: 27254, Stop: 27394, Start Num: 11

Candidate Starts for DillyDally\_40:

(6, 27221), (11, 27254),

Gene: EvePickles\_53 Start: 33650, Stop: 33805, Start Num: 9

Candidate Starts for EvePickles\_53:

(5, 33617), (Start: 9 @33650 has 15 MA's), (22, 33716),

Gene: Faja\_58 Start: 35034, Stop: 35192, Start Num: 9

Candidate Starts for Faja\_58:

(5, 35001), (Start: 9 @35034 has 15 MA's), (19, 35088), (28, 35148), (29, 35172),

Gene: Globfish\_57 Start: 33549, Stop: 33707, Start Num: 9

Candidate Starts for Globfish\_57:

(5, 33516), (Start: 9 @33549 has 15 MA's), (16, 33585), (19, 33603), (20, 33609), (28, 33663),

Gene: Gorpy\_57 Start: 34442, Stop: 34600, Start Num: 9

Candidate Starts for Gorpy\_57:

(5, 34409), (Start: 9 @34442 has 15 MA's), (28, 34556), (29, 34580),

Gene: Hestia\_50 Start: 31086, Stop: 31241, Start Num: 8

Candidate Starts for Hestia\_50:

(4, 30954), (5, 31059), (Start: 8 @31086 has 7 MA's), (10, 31092), (25, 31176), (27, 31197),

Gene: Hillester\_61 Start: 34795, Stop: 34953, Start Num: 9  
Candidate Starts for Hillester\_61:  
(5, 34762), (Start: 9 @34795 has 15 MA's), (16, 34831), (19, 34849), (28, 34909), (29, 34933),

Gene: Isolde\_56 Start: 33119, Stop: 33277, Start Num: 9  
Candidate Starts for Isolde\_56:  
(1, 32810), (5, 33086), (Start: 9 @33119 has 15 MA's), (28, 33233), (29, 33257),

Gene: JellyBread\_54 Start: 32240, Stop: 32398, Start Num: 9  
Candidate Starts for JellyBread\_54:  
(1, 31931), (5, 32207), (Start: 9 @32240 has 15 MA's), (28, 32354),

Gene: Lawnathon\_58 Start: 33611, Stop: 33769, Start Num: 9  
Candidate Starts for Lawnathon\_58:  
(5, 33578), (Start: 9 @33611 has 15 MA's), (28, 33725), (29, 33749),

Gene: MUWow\_55 Start: 33531, Stop: 33689, Start Num: 9  
Candidate Starts for MUWow\_55:  
(5, 33498), (Start: 9 @33531 has 15 MA's), (28, 33645),

Gene: MaterMagnus\_58 Start: 34044, Stop: 34202, Start Num: 9  
Candidate Starts for MaterMagnus\_58:  
(5, 34011), (Start: 9 @34044 has 15 MA's), (19, 34098), (28, 34158),

Gene: MidnightRain\_61 Start: 34972, Stop: 35121, Start Num: 9  
Candidate Starts for MidnightRain\_61:  
(1, 34663), (5, 34939), (Start: 9 @34972 has 15 MA's), (29, 35101), (30, 35110),

Gene: Phrank15\_58 Start: 33748, Stop: 33906, Start Num: 9  
Candidate Starts for Phrank15\_58:  
(5, 33715), (Start: 9 @33748 has 15 MA's), (28, 33862), (29, 33886),

Gene: Pigu\_40 Start: 26382, Stop: 26540, Start Num: 8  
Candidate Starts for Pigu\_40:  
(5, 26352), (Start: 8 @26382 has 7 MA's), (14, 26412), (24, 26466),

Gene: RadFad\_61 Start: 34795, Stop: 34953, Start Num: 9  
Candidate Starts for RadFad\_61:  
(5, 34762), (Start: 9 @34795 has 15 MA's), (16, 34831), (19, 34849), (28, 34909), (29, 34933),

Gene: Raphaella\_56 Start: 33054, Stop: 33212, Start Num: 9  
Candidate Starts for Raphaella\_56:  
(5, 33021), (Start: 9 @33054 has 15 MA's), (28, 33168),

Gene: Raqqa\_50 Start: 31059, Stop: 31217, Start Num: 9  
Candidate Starts for Raqqa\_50:  
(5, 31026), (7, 31035), (Start: 9 @31059 has 15 MA's), (19, 31113), (28, 31173),

Gene: Richie\_59 Start: 34120, Stop: 34272, Start Num: 9  
Candidate Starts for Richie\_59:  
(1, 33811), (5, 34087), (Start: 9 @34120 has 15 MA's), (20, 34177),

Gene: Sakai\_56 Start: 33153, Stop: 33311, Start Num: 9  
Candidate Starts for Sakai\_56:  
(5, 33120), (Start: 9 @33153 has 15 MA's), (28, 33267), (29, 33291),

Gene: Sarge\_38 Start: 25563, Stop: 25703, Start Num: 8  
Candidate Starts for Sarge\_38:  
(Start: 8 @25563 has 7 MA's), (21, 25611),

Gene: Seahorse\_60 Start: 35386, Stop: 35529, Start Num: 8  
Candidate Starts for Seahorse\_60:  
(Start: 8 @35386 has 7 MA's), (13, 35410), (15, 35419), (16, 35422), (18, 35437), (26, 35479),

Gene: Shoya\_44 Start: 27531, Stop: 27671, Start Num: 8  
Candidate Starts for Shoya\_44:  
(5, 27501), (Start: 8 @27531 has 7 MA's), (21, 27579),

Gene: SpicyFrank\_61 Start: 34658, Stop: 34807, Start Num: 9  
Candidate Starts for SpicyFrank\_61:  
(5, 34625), (Start: 9 @34658 has 15 MA's), (28, 34763), (29, 34787),

Gene: ThayneTheZag\_58 Start: 33227, Stop: 33376, Start Num: 9  
Candidate Starts for ThayneTheZag\_58:  
(5, 33194), (Start: 9 @33227 has 15 MA's), (16, 33263), (19, 33281), (28, 33332), (29, 33356),

Gene: Tiff81\_53 Start: 31564, Stop: 31722, Start Num: 9  
Candidate Starts for Tiff81\_53:  
(5, 31531), (Start: 9 @31564 has 15 MA's), (16, 31600), (19, 31618), (28, 31678), (29, 31702),

Gene: Vopal\_60 Start: 36689, Stop: 36838, Start Num: 9  
Candidate Starts for Vopal\_60:  
(5, 36656), (Start: 9 @36689 has 15 MA's), (28, 36794),

Gene: Windest\_60 Start: 32459, Stop: 32608, Start Num: 9  
Candidate Starts for Windest\_60:  
(5, 32426), (Start: 9 @32459 has 15 MA's), (29, 32588), (30, 32597),

Gene: YoungHarleezy\_57 Start: 33617, Stop: 33775, Start Num: 9  
Candidate Starts for YoungHarleezy\_57:  
(1, 33308), (5, 33584), (Start: 9 @33617 has 15 MA's), (28, 33731),

Gene: Zucker\_49 Start: 32109, Stop: 32264, Start Num: 8  
Candidate Starts for Zucker\_49:  
(5, 32082), (Start: 8 @32109 has 7 MA's), (10, 32115),