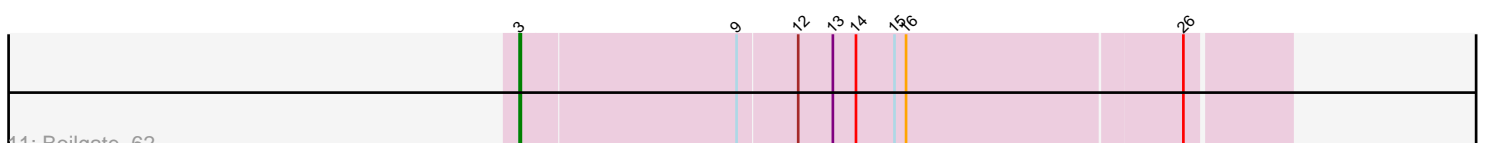
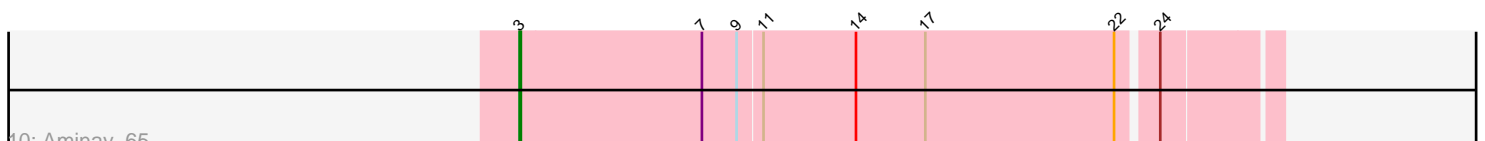
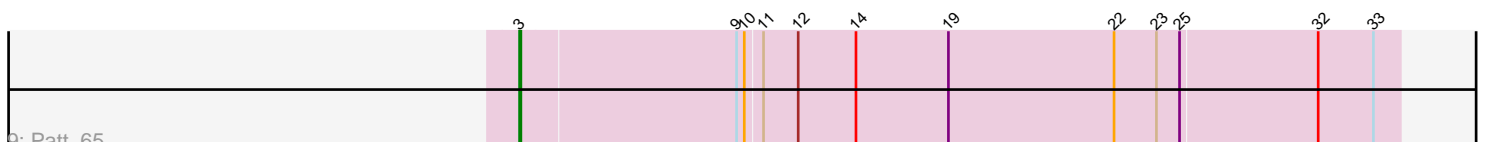
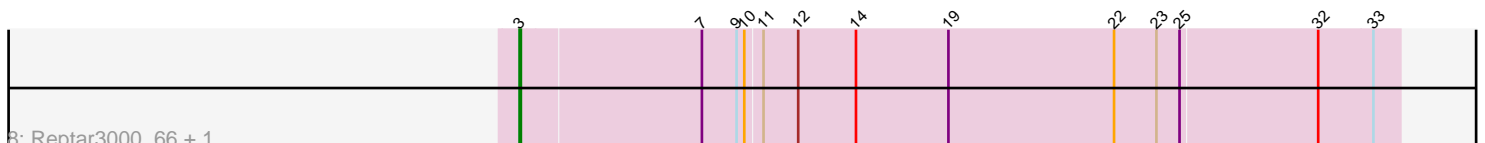
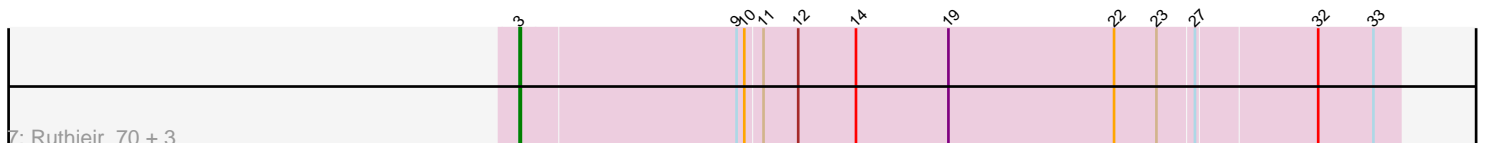
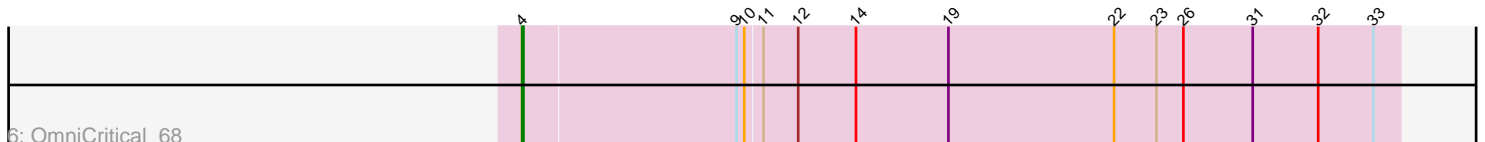
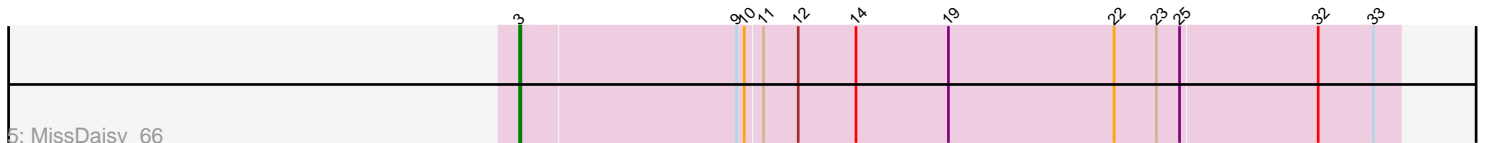
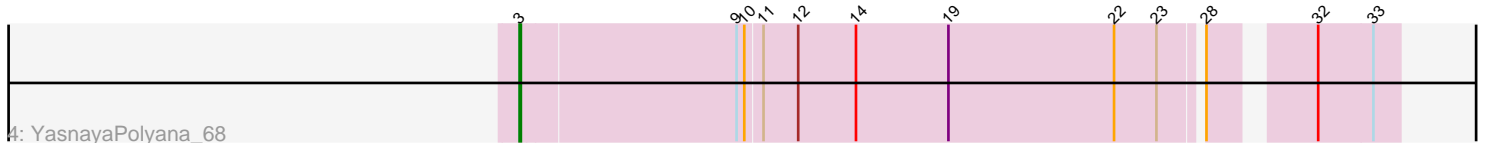
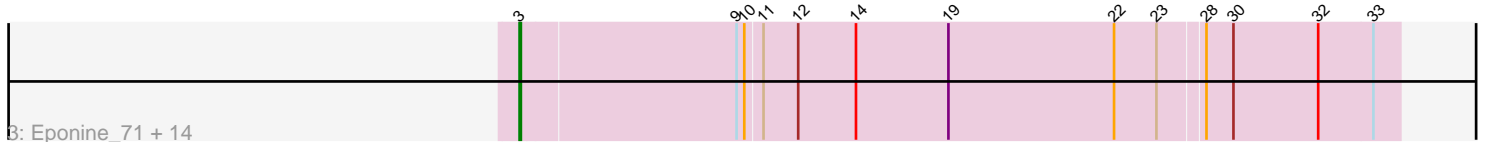
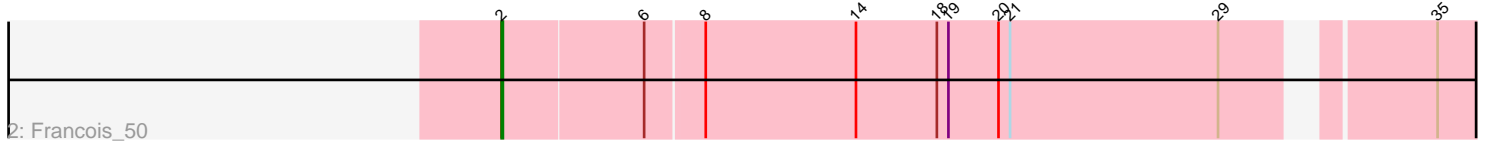
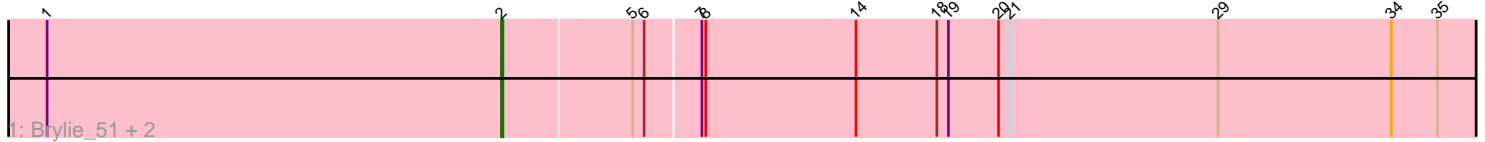


# Pham 294964



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 294964 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294964 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Brylie\_51, Parada\_51, Mulch\_51
- Track 2 : Francois\_50
- Track 3 : Eponine\_71, Qhanda\_71, Kraw\_69, Malthus\_70, SamScheppers\_67, Cheetobro\_69, Chancellor\_69, Juliette\_71, Taquito\_68, Lebo14\_68, Slarp\_69, Fionnbharth\_69, Mitti\_69, DanSyl44\_72, Wintermute\_69
- Track 4 : YasnayaPolyana\_68
- Track 5 : MissDaisy\_66
- Track 6 : OmniCritical\_68
- Track 7 : Ruthiejr\_70, Y10\_66, Y2\_66, JF1\_69
- Track 8 : Reptar3000\_66, Bobquesha\_70
- Track 9 : Patt\_65
- Track 10 : Aminay\_65
- Track 11 : Boilgate\_62

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

The start number called the most often in the published annotations is 3, it was called in 23 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aminay\_65, Bobquesha\_70, Boilgate\_62, Chancellor\_69, Cheetobro\_69, DanSyl44\_72, Eponine\_71, Fionnbharth\_69, JF1\_69, Juliette\_71, Kraw\_69, Lebo14\_68, Malthus\_70, MissDaisy\_66, Mitti\_69, Patt\_65, Qhanda\_71, Reptar3000\_66, Ruthiejr\_70, SamScheppers\_67, Slarp\_69, Taquito\_68, Wintermute\_69, Y10\_66, Y2\_66, YasnayaPolyana\_68,

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

- 

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

- Brylie\_51, Francois\_50, Mulch\_51, OmniCritical\_68, Parada\_51,

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

#### Start 2:

- Found in 4 of 31 ( 12.9% ) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brylie\_51 (DI), Francois\_50 (DI), Mulch\_51 (DI), Parada\_51 (DI),

#### Start 3:

- Found in 26 of 31 ( 83.9% ) of genes in pham
- Manual Annotations of this start: 23 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_65 (K7), Bobquesha\_70 (K4), Boilgate\_62 (K8), Chancellor\_69 (K4), Cheetobro\_69 (K4), DanSyl44\_72 (K4), Eponine\_71 (K4), Fionnbharth\_69 (K4), JF1\_69 (K4), Juliette\_71 (K4), Kraw\_69 (K4), Lebo14\_68 (K4), Malthus\_70 (K4), MissDaisy\_66 (K4), Mitti\_69 (K4), Patt\_65 (K4), Qhanda\_71 (K4), Reptar3000\_66 (K4), Ruthiejr\_70 (K4), SamScheppers\_67 (K4), Slarp\_69 (K4), Taquito\_68 (K4), Wintermute\_69 (K4), Y10\_66 (K4), Y2\_66 (K4), YasnayaPolyana\_68 (K4),

#### Start 4:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OmniCritical\_68 (K4),

### **Summary by clusters:**

There are 4 clusters represented in this pham: K8, DI, K7, K4,

Info for manual annotations of cluster DI:

- Start number 2 was manually annotated 4 times for cluster DI.

Info for manual annotations of cluster K4:

- Start number 3 was manually annotated 21 times for cluster K4.
- Start number 4 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K7:

- Start number 3 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 3 was manually annotated 1 time for cluster K8.

### **Gene Information:**

Gene: Aminay\_65 Start: 42473, Stop: 43045, Start Num: 3

Candidate Starts for Aminay\_65:

(Start: 3 @42473 has 23 MA's), (7, 42614), (9, 42641), (11, 42659), (14, 42731), (17, 42785), (22, 42932), (24, 42959),

Gene: Bobquesha\_70 Start: 41491, Stop: 42162, Start Num: 3

Candidate Starts for Bobquesha\_70:

(Start: 3 @41491 has 23 MA's), (7, 41626), (9, 41653), (10, 41659), (11, 41671), (12, 41698), (14, 41743), (19, 41815), (22, 41944), (23, 41977), (25, 41995), (32, 42100), (33, 42142),

Gene: Boilgate\_62 Start: 44590, Stop: 45171, Start Num: 3

Candidate Starts for Boilgate\_62:

(Start: 3 @44590 has 23 MA's), (9, 44755), (12, 44800), (13, 44827), (14, 44845), (15, 44875), (16, 44884), (26, 45094),

Gene: Brylie\_51 Start: 36552, Stop: 37343, Start Num: 2

Candidate Starts for Brylie\_51:

(1, 36198), (Start: 2 @36552 has 4 MA's), (5, 36651), (6, 36660), (7, 36699), (8, 36702), (14, 36819), (18, 36882), (19, 36891), (20, 36930), (21, 36939), (29, 37101), (34, 37236), (35, 37272),

Gene: Chancellor\_69 Start: 42601, Stop: 43269, Start Num: 3

Candidate Starts for Chancellor\_69:

(Start: 3 @42601 has 23 MA's), (9, 42763), (10, 42769), (11, 42781), (12, 42808), (14, 42853), (19, 42925), (22, 43054), (23, 43087), (28, 43120), (30, 43141), (32, 43207), (33, 43249),

Gene: Cheetobro\_69 Start: 42598, Stop: 43266, Start Num: 3

Candidate Starts for Cheetobro\_69:

(Start: 3 @42598 has 23 MA's), (9, 42760), (10, 42766), (11, 42778), (12, 42805), (14, 42850), (19, 42922), (22, 43051), (23, 43084), (28, 43117), (30, 43138), (32, 43204), (33, 43246),

Gene: DanSyl44\_72 Start: 43792, Stop: 44460, Start Num: 3

Candidate Starts for DanSyl44\_72:

(Start: 3 @43792 has 23 MA's), (9, 43954), (10, 43960), (11, 43972), (12, 43999), (14, 44044), (19, 44116), (22, 44245), (23, 44278), (28, 44311), (30, 44332), (32, 44398), (33, 44440),

Gene: Eponine\_71 Start: 43444, Stop: 44112, Start Num: 3

Candidate Starts for Eponine\_71:

(Start: 3 @43444 has 23 MA's), (9, 43606), (10, 43612), (11, 43624), (12, 43651), (14, 43696), (19, 43768), (22, 43897), (23, 43930), (28, 43963), (30, 43984), (32, 44050), (33, 44092),

Gene: Fionnbharth\_69 Start: 42842, Stop: 43510, Start Num: 3

Candidate Starts for Fionnbharth\_69:

(Start: 3 @42842 has 23 MA's), (9, 43004), (10, 43010), (11, 43022), (12, 43049), (14, 43094), (19, 43166), (22, 43295), (23, 43328), (28, 43361), (30, 43382), (32, 43448), (33, 43490),

Gene: Francois\_50 Start: 36554, Stop: 37309, Start Num: 2

Candidate Starts for Francois\_50:

(Start: 2 @36554 has 4 MA's), (6, 36662), (8, 36704), (14, 36821), (18, 36884), (19, 36893), (20, 36932), (21, 36941), (29, 37103), (35, 37238),

Gene: JF1\_69 Start: 42759, Stop: 43424, Start Num: 3

Candidate Starts for JF1\_69:

(Start: 3 @42759 has 23 MA's), (9, 42921), (10, 42927), (11, 42939), (12, 42966), (14, 43011), (19, 43083), (22, 43212), (23, 43245), (27, 43272), (32, 43362), (33, 43404),

Gene: Juliette\_71 Start: 42906, Stop: 43574, Start Num: 3

Candidate Starts for Juliette\_71:

(Start: 3 @42906 has 23 MA's), (9, 43068), (10, 43074), (11, 43086), (12, 43113), (14, 43158), (19, 43230), (22, 43359), (23, 43392), (28, 43425), (30, 43446), (32, 43512), (33, 43554),

Gene: Kraw\_69 Start: 42594, Stop: 43262, Start Num: 3

Candidate Starts for Kraw\_69:

(Start: 3 @42594 has 23 MA's), (9, 42756), (10, 42762), (11, 42774), (12, 42801), (14, 42846), (19, 42918), (22, 43047), (23, 43080), (28, 43113), (30, 43134), (32, 43200), (33, 43242),

Gene: Lebo14\_68 Start: 42927, Stop: 43595, Start Num: 3

Candidate Starts for Lebo14\_68:

(Start: 3 @42927 has 23 MA's), (9, 43089), (10, 43095), (11, 43107), (12, 43134), (14, 43179), (19, 43251), (22, 43380), (23, 43413), (28, 43446), (30, 43467), (32, 43533), (33, 43575),

Gene: Malthus\_70 Start: 42594, Stop: 43262, Start Num: 3

Candidate Starts for Malthus\_70:

(Start: 3 @42594 has 23 MA's), (9, 42756), (10, 42762), (11, 42774), (12, 42801), (14, 42846), (19, 42918), (22, 43047), (23, 43080), (28, 43113), (30, 43134), (32, 43200), (33, 43242),

Gene: MissDaisy\_66 Start: 41506, Stop: 42177, Start Num: 3

Candidate Starts for MissDaisy\_66:

(Start: 3 @41506 has 23 MA's), (9, 41668), (10, 41674), (11, 41686), (12, 41713), (14, 41758), (19, 41830), (22, 41959), (23, 41992), (25, 42010), (32, 42115), (33, 42157),

Gene: Mitti\_69 Start: 42773, Stop: 43417, Start Num: 3

Candidate Starts for Mitti\_69:

(Start: 3 @42773 has 23 MA's), (9, 42935), (10, 42941), (11, 42953), (12, 42980), (14, 43025), (19, 43097), (22, 43226), (23, 43259), (28, 43292), (30, 43313), (32, 43355), (33, 43397),

Gene: Mulch\_51 Start: 36552, Stop: 37343, Start Num: 2

Candidate Starts for Mulch\_51:

(1, 36198), (Start: 2 @36552 has 4 MA's), (5, 36651), (6, 36660), (7, 36699), (8, 36702), (14, 36819), (18, 36882), (19, 36891), (20, 36930), (21, 36939), (29, 37101), (34, 37236), (35, 37272),

Gene: OmniCritical\_68 Start: 42624, Stop: 43298, Start Num: 4

Candidate Starts for OmniCritical\_68:

(Start: 4 @42624 has 1 MA's), (9, 42786), (10, 42792), (11, 42804), (12, 42831), (14, 42876), (19, 42948), (22, 43077), (23, 43110), (26, 43131), (31, 43185), (32, 43236), (33, 43278),

Gene: Parada\_51 Start: 36552, Stop: 37343, Start Num: 2

Candidate Starts for Parada\_51:

(1, 36198), (Start: 2 @36552 has 4 MA's), (5, 36651), (6, 36660), (7, 36699), (8, 36702), (14, 36819), (18, 36882), (19, 36891), (20, 36930), (21, 36939), (29, 37101), (34, 37236), (35, 37272),

Gene: Patt\_65 Start: 41230, Stop: 41901, Start Num: 3

Candidate Starts for Patt\_65:

(Start: 3 @41230 has 23 MA's), (9, 41392), (10, 41398), (11, 41410), (12, 41437), (14, 41482), (19, 41554), (22, 41683), (23, 41716), (25, 41734), (32, 41839), (33, 41881),

Gene: Qhanda\_71 Start: 42610, Stop: 43278, Start Num: 3

Candidate Starts for Qhanda\_71:

(Start: 3 @42610 has 23 MA's), (9, 42772), (10, 42778), (11, 42790), (12, 42817), (14, 42862), (19, 42934), (22, 43063), (23, 43096), (28, 43129), (30, 43150), (32, 43216), (33, 43258),

Gene: Reptar3000\_66 Start: 41218, Stop: 41889, Start Num: 3

Candidate Starts for Reptar3000\_66:

(Start: 3 @41218 has 23 MA's), (7, 41353), (9, 41380), (10, 41386), (11, 41398), (12, 41425), (14, 41470), (19, 41542), (22, 41671), (23, 41704), (25, 41722), (32, 41827), (33, 41869),

Gene: Ruthiejr\_70 Start: 42644, Stop: 43309, Start Num: 3

Candidate Starts for Ruthiejr\_70:

(Start: 3 @42644 has 23 MA's), (9, 42806), (10, 42812), (11, 42824), (12, 42851), (14, 42896), (19, 42968), (22, 43097), (23, 43130), (27, 43157), (32, 43247), (33, 43289),

Gene: SamScheppers\_67 Start: 43073, Stop: 43741, Start Num: 3

Candidate Starts for SamScheppers\_67:

(Start: 3 @43073 has 23 MA's), (9, 43235), (10, 43241), (11, 43253), (12, 43280), (14, 43325), (19, 43397), (22, 43526), (23, 43559), (28, 43592), (30, 43613), (32, 43679), (33, 43721),

Gene: Slarp\_69 Start: 42601, Stop: 43269, Start Num: 3

Candidate Starts for Slarp\_69:

(Start: 3 @42601 has 23 MA's), (9, 42763), (10, 42769), (11, 42781), (12, 42808), (14, 42853), (19, 42925), (22, 43054), (23, 43087), (28, 43120), (30, 43141), (32, 43207), (33, 43249),

Gene: Taquito\_68 Start: 42836, Stop: 43474, Start Num: 3

Candidate Starts for Taquito\_68:

(Start: 3 @42836 has 23 MA's), (9, 42998), (10, 43004), (11, 43016), (12, 43043), (14, 43088), (19, 43160), (22, 43289), (23, 43322), (28, 43355), (30, 43376), (32, 43412), (33, 43454),

Gene: Wintermute\_69 Start: 42831, Stop: 43499, Start Num: 3

Candidate Starts for Wintermute\_69:

(Start: 3 @42831 has 23 MA's), (9, 42993), (10, 42999), (11, 43011), (12, 43038), (14, 43083), (19, 43155), (22, 43284), (23, 43317), (28, 43350), (30, 43371), (32, 43437), (33, 43479),

Gene: Y10\_66 Start: 42759, Stop: 43424, Start Num: 3

Candidate Starts for Y10\_66:

(Start: 3 @42759 has 23 MA's), (9, 42921), (10, 42927), (11, 42939), (12, 42966), (14, 43011), (19, 43083), (22, 43212), (23, 43245), (27, 43272), (32, 43362), (33, 43404),

Gene: Y2\_66 Start: 42759, Stop: 43424, Start Num: 3

Candidate Starts for Y2\_66:

(Start: 3 @42759 has 23 MA's), (9, 42921), (10, 42927), (11, 42939), (12, 42966), (14, 43011), (19, 43083), (22, 43212), (23, 43245), (27, 43272), (32, 43362), (33, 43404),

Gene: YasnayaPolyana\_68 Start: 42684, Stop: 43325, Start Num: 3

Candidate Starts for YasnayaPolyana\_68:

(Start: 3 @42684 has 23 MA's), (9, 42846), (10, 42852), (11, 42864), (12, 42891), (14, 42936), (19, 43008), (22, 43137), (23, 43170), (28, 43197), (32, 43263), (33, 43305),