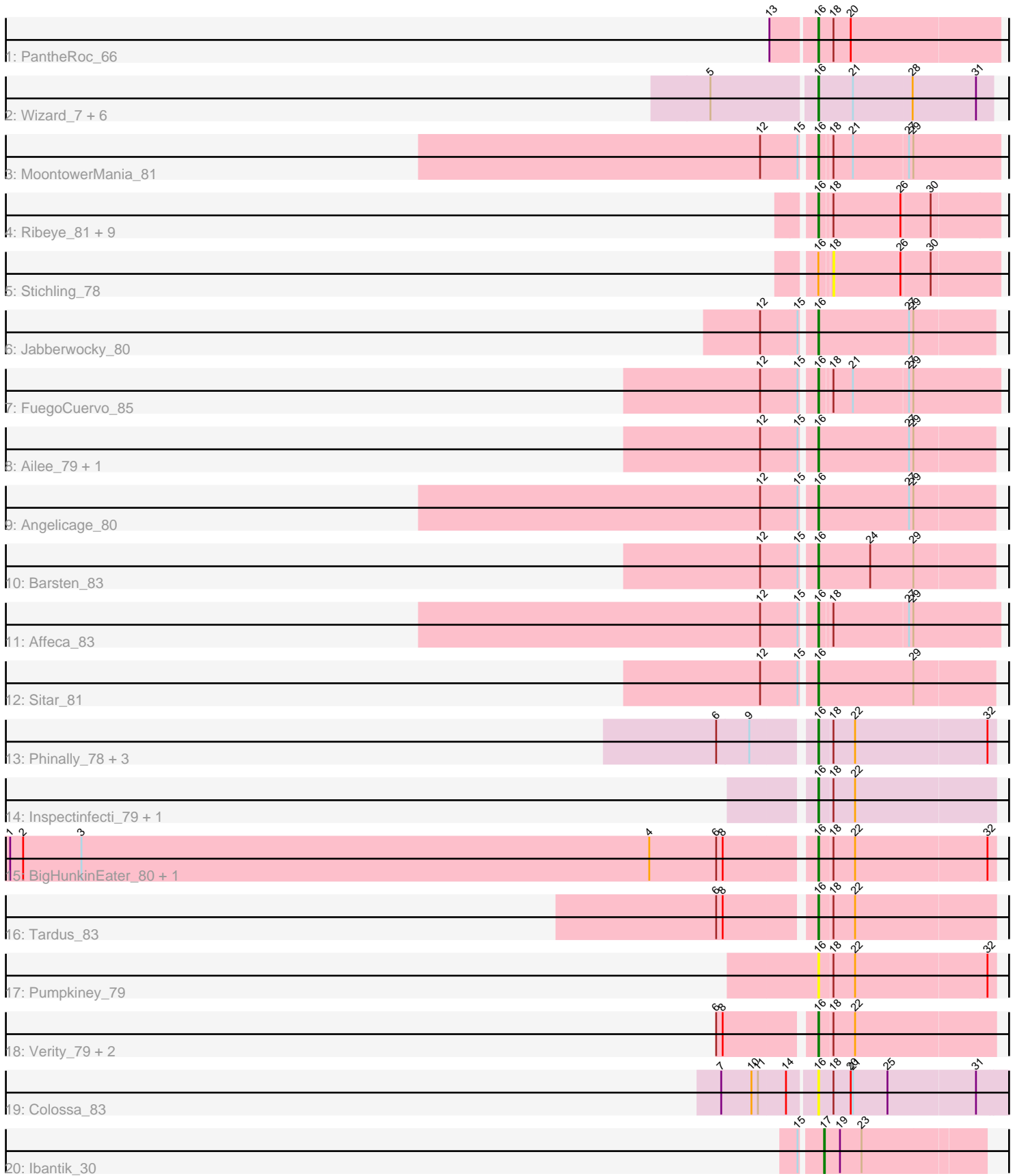


Pham 301372



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 301372 Report

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

Pham number 301372 has 43 members, 4 are drafts.

Phages represented in each track:

- Track 1 : PantheRoc\_66
- Track 2 : Wizard\_7, Egi03\_7, Fireball\_7, Sendy\_7, Gezellig\_7, Phlop\_7, PullumCavea\_7
- Track 3 : MoontowerMania\_81
- Track 4 : Ribeye\_81, Bizzy\_82, Gustavo\_83, Saronaya\_83, Flatwoods\_82, Kroos\_82, Tycho\_81, Tangerine\_82, Kwobi\_84, Derg\_74
- Track 5 : Stichling\_78
- Track 6 : Jabberwocky\_80
- Track 7 : FuegoCuervo\_85
- Track 8 : Ailee\_79, Shivanishola\_83
- Track 9 : Angelicage\_80
- Track 10 : Barsten\_83
- Track 11 : Affeca\_83
- Track 12 : Sitar\_81
- Track 13 : Phinally\_78, Leonard\_78, Phauci\_70, Hans\_79
- Track 14 : Inspectinfecti\_79, Ali17\_75
- Track 15 : BigHunkinEater\_80, Zitch\_81
- Track 16 : Tardus\_83
- Track 17 : Pumpkiney\_79
- Track 18 : Verity\_79, DoctorFroggo\_80, Delrey21\_80
- Track 19 : Colossa\_83
- Track 20 : Ibantik\_30

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

The start number called the most often in the published annotations is 16, it was called in 38 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca\_83, Ailee\_79, Ali17\_75, Angelicage\_80, Barsten\_83, BigHunkinEater\_80, Bizzy\_82, Colossa\_83, Delrey21\_80, Derg\_74, DoctorFroggo\_80, Egi03\_7, Fireball\_7, Flatwoods\_82, FuegoCuervo\_85, Gezellig\_7, Gustavo\_83, Hans\_79, Inspectinfecti\_79, Jabberwocky\_80, Kroos\_82, Kwobi\_84, Leonard\_78, MoontowerMania\_81, PantheRoc\_66, Phauci\_70, Phinally\_78, Phlop\_7,

PullumCavea\_7, Pumpkiney\_79, Ribeye\_81, Saronaya\_83, Sendy\_7, Shivanishola\_83, Sitar\_81, Tangerine\_82, Tardus\_83, Tycho\_81, Verity\_79, Wizard\_7, Zitch\_81,

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

- Stichling\_78,

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

- Ibantik\_30,

### Summary by start number:

Start 16:

- Found in 42 of 43 ( 97.7% ) of genes in pham
- Manual Annotations of this start: 38 of 39
- Called 97.6% of time when present
- Phage (with cluster) where this start called: Affeca\_83 (DE1), Ailee\_79 (DE1), Ali17\_75 (DE2), Angelicage\_80 (DE1), Barsten\_83 (DE1), BigHunkinEater\_80 (DE4), Bizzy\_82 (DE1), Colossa\_83 (KA), Delrey21\_80 (DE4), Derg\_74 (DE1), DoctorFroggo\_80 (DE4), Egi03\_7 (DC1), Fireball\_7 (DC1), Flatwoods\_82 (DE1), FuegoCuervo\_85 (DE1), Gezellig\_7 (DC1), Gustavo\_83 (DE1), Hans\_79 (DE2), Inspectinfecti\_79 (DE2), Jabberwocky\_80 (DE1), Kroos\_82 (DE1), Kwobi\_84 (DE1), Leonard\_78 (DE2), MoontowerMania\_81 (DE1), PantheRoc\_66 (CZ3), Phauci\_70 (DE2), Phinally\_78 (DE2), Phlop\_7 (DC1), PullumCavea\_7 (DC1), Pumpkiney\_79 (DE4), Ribeye\_81 (DE1), Saronaya\_83 (DE1), Sendy\_7 (DC1), Shivanishola\_83 (DE1), Sitar\_81 (DE1), Tangerine\_82 (DE1), Tardus\_83 (DE4), Tycho\_81 (DE1), Verity\_79 (DE4), Wizard\_7 (DC1), Zitch\_81 (DE4),

Start 17:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik\_30 (singleton),

Start 18:

- Found in 29 of 43 ( 67.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Stichling\_78 (DE1),

### Summary by clusters:

There are 7 clusters represented in this pham: singleton, CZ3, DE2, DE4, KA, DE1, DC1,

Info for manual annotations of cluster CZ3:

- Start number 16 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster DC1:

- Start number 16 was manually annotated 6 times for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 16 was manually annotated 19 times for cluster DE1.

Info for manual annotations of cluster DE2:

•Start number 16 was manually annotated 6 times for cluster DE2.

Info for manual annotations of cluster DE4:

•Start number 16 was manually annotated 6 times for cluster DE4.

**Gene Information:**

Gene: Affeca\_83 Start: 57314, Stop: 57556, Start Num: 16

Candidate Starts for Affeca\_83:

(12, 57248), (15, 57296), (Start: 16 @57314 has 38 MA's), (18, 57329), (27, 57431), (29, 57437),

Gene: Ailee\_79 Start: 56341, Stop: 56583, Start Num: 16

Candidate Starts for Ailee\_79:

(12, 56275), (15, 56323), (Start: 16 @56341 has 38 MA's), (27, 56467), (29, 56473),

Gene: Ali17\_75 Start: 54408, Stop: 54647, Start Num: 16

Candidate Starts for Ali17\_75:

(Start: 16 @54408 has 38 MA's), (18, 54426), (22, 54456),

Gene: Angelicage\_80 Start: 57282, Stop: 57524, Start Num: 16

Candidate Starts for Angelicage\_80:

(12, 57216), (15, 57264), (Start: 16 @57282 has 38 MA's), (27, 57408), (29, 57414),

Gene: Barsten\_83 Start: 57245, Stop: 57487, Start Num: 16

Candidate Starts for Barsten\_83:

(12, 57179), (15, 57227), (Start: 16 @57245 has 38 MA's), (24, 57317), (29, 57377),

Gene: BigHunkinEater\_80 Start: 55013, Stop: 55252, Start Num: 16

Candidate Starts for BigHunkinEater\_80:

(1, 53909), (2, 53927), (3, 54008), (4, 54797), (6, 54890), (8, 54899), (Start: 16 @55013 has 38 MA's), (18, 55031), (22, 55061), (32, 55241),

Gene: Bizzy\_82 Start: 55643, Stop: 55882, Start Num: 16

Candidate Starts for Bizzy\_82:

(Start: 16 @55643 has 38 MA's), (18, 55658), (26, 55751), (30, 55790),

Gene: Colossa\_83 Start: 46578, Stop: 46835, Start Num: 16

Candidate Starts for Colossa\_83:

(7, 46455), (10, 46497), (11, 46506), (14, 46542), (Start: 16 @46578 has 38 MA's), (18, 46596), (20, 46620), (21, 46623), (25, 46671), (31, 46791),

Gene: Delrey21\_80 Start: 57154, Stop: 57393, Start Num: 16

Candidate Starts for Delrey21\_80:

(6, 57031), (8, 57040), (Start: 16 @57154 has 38 MA's), (18, 57172), (22, 57202),

Gene: Derg\_74 Start: 54265, Stop: 54504, Start Num: 16

Candidate Starts for Derg\_74:

(Start: 16 @54265 has 38 MA's), (18, 54280), (26, 54373), (30, 54412),

Gene: DoctorFroggo\_80 Start: 57154, Stop: 57393, Start Num: 16  
Candidate Starts for DoctorFroggo\_80:  
(6, 57031), (8, 57040), (Start: 16 @57154 has 38 MA's), (18, 57172), (22, 57202),

Gene: Egi03\_7 Start: 3557, Stop: 3793, Start Num: 16  
Candidate Starts for Egi03\_7:  
(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Fireball\_7 Start: 3557, Stop: 3793, Start Num: 16  
Candidate Starts for Fireball\_7:  
(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Flatwoods\_82 Start: 55178, Stop: 55417, Start Num: 16  
Candidate Starts for Flatwoods\_82:  
(Start: 16 @55178 has 38 MA's), (18, 55193), (26, 55286), (30, 55325),

Gene: FuegoCuervo\_85 Start: 56784, Stop: 57026, Start Num: 16  
Candidate Starts for FuegoCuervo\_85:  
(12, 56718), (15, 56766), (Start: 16 @56784 has 38 MA's), (18, 56799), (21, 56826), (27, 56901), (29, 56907),

Gene: Gezellig\_7 Start: 3557, Stop: 3793, Start Num: 16  
Candidate Starts for Gezellig\_7:  
(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Gustavo\_83 Start: 56361, Stop: 56600, Start Num: 16  
Candidate Starts for Gustavo\_83:  
(Start: 16 @56361 has 38 MA's), (18, 56376), (26, 56469), (30, 56508),

Gene: Hans\_79 Start: 55335, Stop: 55574, Start Num: 16  
Candidate Starts for Hans\_79:  
(6, 55212), (9, 55257), (Start: 16 @55335 has 38 MA's), (18, 55353), (22, 55383), (32, 55563),

Gene: Ibantik\_30 Start: 14992, Stop: 14777, Start Num: 17  
Candidate Starts for Ibantik\_30:  
(15, 15019), (Start: 17 @14992 has 1 MA's), (19, 14971), (23, 14941),

Gene: Inspectinfecti\_79 Start: 55312, Stop: 55551, Start Num: 16  
Candidate Starts for Inspectinfecti\_79:  
(Start: 16 @55312 has 38 MA's), (18, 55330), (22, 55360),

Gene: Jabberwocky\_80 Start: 57354, Stop: 57596, Start Num: 16  
Candidate Starts for Jabberwocky\_80:  
(12, 57288), (15, 57336), (Start: 16 @57354 has 38 MA's), (27, 57480), (29, 57486),

Gene: Kroos\_82 Start: 56304, Stop: 56543, Start Num: 16  
Candidate Starts for Kroos\_82:  
(Start: 16 @56304 has 38 MA's), (18, 56319), (26, 56412), (30, 56451),

Gene: Kwobi\_84 Start: 56813, Stop: 57052, Start Num: 16  
Candidate Starts for Kwobi\_84:  
(Start: 16 @56813 has 38 MA's), (18, 56828), (26, 56921), (30, 56960),

Gene: Leonard\_78 Start: 55375, Stop: 55614, Start Num: 16

Candidate Starts for Leonard\_78:

(6, 55252), (9, 55297), (Start: 16 @55375 has 38 MA's), (18, 55393), (22, 55423), (32, 55603),

Gene: MoontowerMania\_81 Start: 57695, Stop: 57937, Start Num: 16

Candidate Starts for MoontowerMania\_81:

(12, 57629), (15, 57677), (Start: 16 @57695 has 38 MA's), (18, 57710), (21, 57737), (27, 57812), (29, 57818),

Gene: PantheRoc\_66 Start: 44024, Stop: 44269, Start Num: 16

Candidate Starts for PantheRoc\_66:

(13, 43970), (Start: 16 @44024 has 38 MA's), (18, 44042), (20, 44066),

Gene: Phauci\_70 Start: 52412, Stop: 52651, Start Num: 16

Candidate Starts for Phauci\_70:

(6, 52289), (9, 52334), (Start: 16 @52412 has 38 MA's), (18, 52430), (22, 52460), (32, 52640),

Gene: Phinally\_78 Start: 55372, Stop: 55611, Start Num: 16

Candidate Starts for Phinally\_78:

(6, 55249), (9, 55294), (Start: 16 @55372 has 38 MA's), (18, 55390), (22, 55420), (32, 55600),

Gene: Phlop\_7 Start: 3557, Stop: 3793, Start Num: 16

Candidate Starts for Phlop\_7:

(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: PullumCavea\_7 Start: 3557, Stop: 3793, Start Num: 16

Candidate Starts for PullumCavea\_7:

(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Pumpkiney\_79 Start: 53976, Stop: 54215, Start Num: 16

Candidate Starts for Pumpkiney\_79:

(Start: 16 @53976 has 38 MA's), (18, 53994), (22, 54024), (32, 54204),

Gene: Ribeye\_81 Start: 55504, Stop: 55743, Start Num: 16

Candidate Starts for Ribeye\_81:

(Start: 16 @55504 has 38 MA's), (18, 55519), (26, 55612), (30, 55651),

Gene: Saronaya\_83 Start: 56361, Stop: 56600, Start Num: 16

Candidate Starts for Saronaya\_83:

(Start: 16 @56361 has 38 MA's), (18, 56376), (26, 56469), (30, 56508),

Gene: Sendy\_7 Start: 3557, Stop: 3793, Start Num: 16

Candidate Starts for Sendy\_7:

(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Shivanishola\_83 Start: 55640, Stop: 55882, Start Num: 16

Candidate Starts for Shivanishola\_83:

(12, 55574), (15, 55622), (Start: 16 @55640 has 38 MA's), (27, 55766), (29, 55772),

Gene: Sitar\_81 Start: 57762, Stop: 58004, Start Num: 16

Candidate Starts for Sitar\_81:

(12, 57696), (15, 57744), (Start: 16 @57762 has 38 MA's), (29, 57894),

Gene: Stichling\_78 Start: 55322, Stop: 55546, Start Num: 18  
Candidate Starts for Stichling\_78:  
(Start: 16 @55307 has 38 MA's), (18, 55322), (26, 55415), (30, 55454),

Gene: Tangerine\_82 Start: 55637, Stop: 55876, Start Num: 16  
Candidate Starts for Tangerine\_82:  
(Start: 16 @55637 has 38 MA's), (18, 55652), (26, 55745), (30, 55784),

Gene: Tardus\_83 Start: 56466, Stop: 56705, Start Num: 16  
Candidate Starts for Tardus\_83:  
(6, 56343), (8, 56352), (Start: 16 @56466 has 38 MA's), (18, 56484), (22, 56514),

Gene: Tycho\_81 Start: 55839, Stop: 56078, Start Num: 16  
Candidate Starts for Tycho\_81:  
(Start: 16 @55839 has 38 MA's), (18, 55854), (26, 55947), (30, 55986),

Gene: Verity\_79 Start: 57016, Stop: 57255, Start Num: 16  
Candidate Starts for Verity\_79:  
(6, 56893), (8, 56902), (Start: 16 @57016 has 38 MA's), (18, 57034), (22, 57064),

Gene: Wizard\_7 Start: 3557, Stop: 3793, Start Num: 16  
Candidate Starts for Wizard\_7:  
(5, 3416), (Start: 16 @3557 has 38 MA's), (21, 3602), (28, 3683), (31, 3770),

Gene: Zitch\_81 Start: 55195, Stop: 55434, Start Num: 16  
Candidate Starts for Zitch\_81:  
(1, 54091), (2, 54109), (3, 54190), (4, 54979), (6, 55072), (8, 55081), (Start: 16 @55195 has 38 MA's),  
(18, 55213), (22, 55243), (32, 55423),