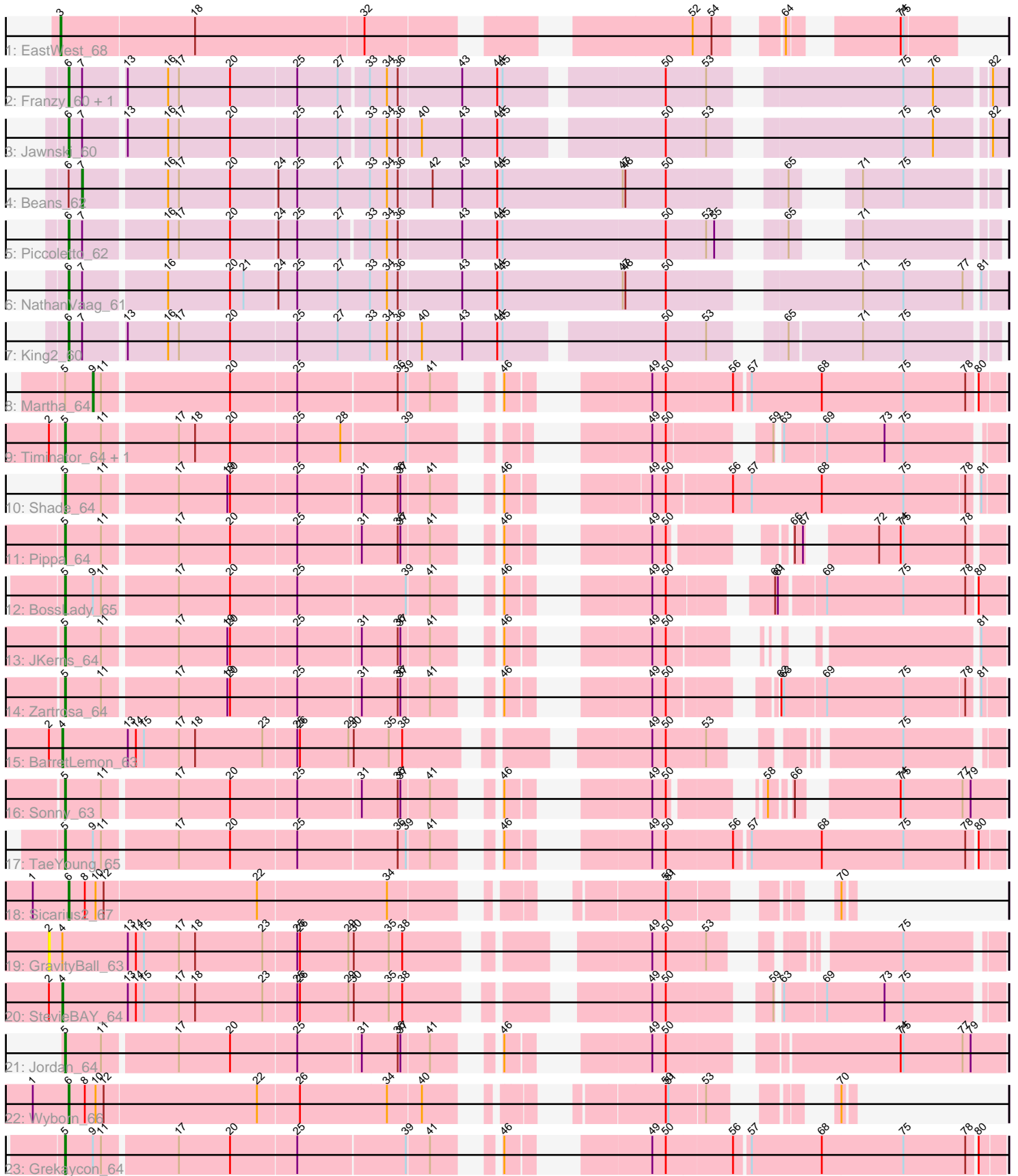


Pham 170259



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 170259 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170259 has 25 members, 1 are drafts.

Phages represented in each track:

- Track 1 : EastWest\_68
- Track 2 : Franzy\_60, Brent\_61
- Track 3 : Jawnski\_60
- Track 4 : Beans\_62
- Track 5 : Piccoletto\_62
- Track 6 : NathanVaag\_61
- Track 7 : King2\_60
- Track 8 : Martha\_64
- Track 9 : Timinator\_64, LeeroyJ\_64
- Track 10 : Shade\_64
- Track 11 : Pippa\_64
- Track 12 : BossLady\_65
- Track 13 : JKerns\_64
- Track 14 : Zartrosa\_64
- Track 15 : BarretLemon\_63
- Track 16 : Sonny\_63
- Track 17 : TaeYoung\_65
- Track 18 : Sicarius2\_67
- Track 19 : GravityBall\_63
- Track 20 : StevieBAY\_64
- Track 21 : Jordan\_64
- Track 22 : Wyborn\_66
- Track 23 : Grekaycon\_64

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

The start number called the most often in the published annotations is 5, it was called in 11 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BossLady\_65, Grekaycon\_64, JKerns\_64, Jordan\_64, LeeroyJ\_64, Pippa\_64, Shade\_64, Sonny\_63, TaeYoung\_65, Timinator\_64, Zartrosa\_64,

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

- Martha\_64,

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

- BarretLemon\_63, Beans\_62, Brent\_61, EastWest\_68, Franzy\_60, GravityBall\_63, Jawnski\_60, King2\_60, NathanVaag\_61, Piccoletto\_62, Sicarius2\_67, StevieBAY\_64, Wyborn\_66,

### Summary by start number:

Start 2:

- Found in 5 of 25 ( 20.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: GravityBall\_63 (AO2),

Start 3:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest\_68 (AO),

Start 4:

- Found in 3 of 25 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BarretLemon\_63 (AO2), StevieBAY\_64 (AO2),

Start 5:

- Found in 12 of 25 ( 48.0% ) of genes in pham
- Manual Annotations of this start: 11 of 24
- Called 91.7% of time when present
- Phage (with cluster) where this start called: BossLady\_65 (AO2), Grekaycon\_64 (AO2), JKerns\_64 (AO2), Jordan\_64 (AO2), LeeroyJ\_64 (AO2), Pippa\_64 (AO2), Shade\_64 (AO2), Sonny\_63 (AO2), TaeYoung\_65 (AO2), Timinator\_64 (AO2), Zartrosa\_64 (AO2),

Start 6:

- Found in 9 of 25 ( 36.0% ) of genes in pham
- Manual Annotations of this start: 8 of 24
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Brent\_61 (AO1), Franzy\_60 (AO1), Jawnski\_60 (AO1), King2\_60 (AO1), NathanVaag\_61 (AO1), Piccoletto\_62 (AO1), Sicarius2\_67 (AO2), Wyborn\_66 (AO2),

Start 7:

- Found in 7 of 25 ( 28.0% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Beans\_62 (AO1),

Start 9:

- Found in 4 of 25 ( 16.0% ) of genes in pham

- Manual Annotations of this start: 1 of 24
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Martha\_64 (AO2),

### Summary by clusters:

There are 3 clusters represented in this pham: AO, AO2, AO1,

Info for manual annotations of cluster AO:

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

Info for manual annotations of cluster AO1:

- Start number 6 was manually annotated 6 times for cluster AO1.
- Start number 7 was manually annotated 1 time for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 4 was manually annotated 2 times for cluster AO2.
- Start number 5 was manually annotated 11 times for cluster AO2.
- Start number 6 was manually annotated 2 times for cluster AO2.
- Start number 9 was manually annotated 1 time for cluster AO2.

### Gene Information:

Gene: BarretLemon\_63 Start: 41758, Stop: 42645, Start Num: 4

Candidate Starts for BarretLemon\_63:

(2, 41743), (Start: 4 @41758 has 2 MA's), (13, 41830), (14, 41839), (15, 41848), (17, 41887), (18, 41905), (23, 41980), (25, 42016), (26, 42019), (29, 42073), (30, 42079), (35, 42118), (38, 42133), (49, 42343), (50, 42358), (53, 42400), (75, 42547),

Gene: Beans\_62 Start: 41800, Stop: 42702, Start Num: 7

Candidate Starts for Beans\_62:

(Start: 6 @41785 has 8 MA's), (Start: 7 @41800 has 1 MA's), (16, 41887), (17, 41899), (20, 41956), (24, 42007), (25, 42028), (27, 42073), (33, 42109), (34, 42127), (36, 42139), (42, 42175), (43, 42208), (44, 42247), (45, 42253), (47, 42385), (48, 42388), (50, 42433), (65, 42529), (71, 42562), (75, 42607),

Gene: BossLady\_65 Start: 42154, Stop: 43032, Start Num: 5

Candidate Starts for BossLady\_65:

(Start: 5 @42154 has 11 MA's), (Start: 9 @42184 has 1 MA's), (11, 42193), (17, 42271), (20, 42328), (25, 42400), (39, 42517), (41, 42541), (46, 42583), (49, 42691), (50, 42706), (60, 42793), (61, 42796), (69, 42841), (75, 42925), (78, 42994), (80, 43003),

Gene: Brent\_61 Start: 41856, Stop: 42800, Start Num: 6

Candidate Starts for Brent\_61:

(Start: 6 @41856 has 8 MA's), (Start: 7 @41871 has 1 MA's), (13, 41913), (16, 41958), (17, 41970), (20, 42027), (25, 42099), (27, 42144), (33, 42174), (34, 42192), (36, 42204), (43, 42273), (44, 42312), (45, 42318), (50, 42474), (53, 42516), (75, 42696), (76, 42729), (82, 42783),

Gene: EastWest\_68 Start: 41040, Stop: 41876, Start Num: 3

Candidate Starts for EastWest\_68:

(Start: 3 @41040 has 1 MA's), (18, 41187), (32, 41373), (52, 41661), (54, 41682), (64, 41727), (74, 41817), (75, 41820),

Gene: Franzy\_60 Start: 41872, Stop: 42816, Start Num: 6

Candidate Starts for Franzy\_60:

(Start: 6 @41872 has 8 MA's), (Start: 7 @41887 has 1 MA's), (13, 41929), (16, 41974), (17, 41986), (20, 42043), (25, 42115), (27, 42160), (33, 42190), (34, 42208), (36, 42220), (43, 42289), (44, 42328), (45, 42334), (50, 42490), (53, 42532), (75, 42712), (76, 42745), (82, 42799),

Gene: GravityBall\_63 Start: 42043, Stop: 42945, Start Num: 2

Candidate Starts for GravityBall\_63:

(2, 42043), (Start: 4 @42058 has 2 MA's), (13, 42130), (14, 42139), (15, 42148), (17, 42187), (18, 42205), (23, 42280), (25, 42316), (26, 42319), (29, 42373), (30, 42379), (35, 42418), (38, 42433), (49, 42643), (50, 42658), (53, 42700), (75, 42847),

Gene: Grekaycon\_64 Start: 42033, Stop: 42944, Start Num: 5

Candidate Starts for Grekaycon\_64:

(Start: 5 @42033 has 11 MA's), (Start: 9 @42063 has 1 MA's), (11, 42072), (17, 42150), (20, 42207), (25, 42279), (39, 42396), (41, 42420), (46, 42462), (49, 42570), (50, 42585), (56, 42657), (57, 42672), (68, 42750), (75, 42840), (78, 42909), (80, 42918),

Gene: JKerns\_64 Start: 42255, Stop: 43070, Start Num: 5

Candidate Starts for JKerns\_64:

(Start: 5 @42255 has 11 MA's), (11, 42294), (17, 42372), (19, 42426), (20, 42429), (25, 42501), (31, 42567), (36, 42606), (37, 42609), (41, 42639), (46, 42681), (49, 42789), (50, 42804), (81, 43044),

Gene: Jawnski\_60 Start: 41381, Stop: 42325, Start Num: 6

Candidate Starts for Jawnski\_60:

(Start: 6 @41381 has 8 MA's), (Start: 7 @41396 has 1 MA's), (13, 41438), (16, 41483), (17, 41495), (20, 41552), (25, 41624), (27, 41669), (33, 41699), (34, 41717), (36, 41729), (40, 41753), (43, 41798), (44, 41837), (45, 41843), (50, 41999), (53, 42041), (75, 42221), (76, 42254), (82, 42308),

Gene: Jordan\_64 Start: 42135, Stop: 43022, Start Num: 5

Candidate Starts for Jordan\_64:

(Start: 5 @42135 has 11 MA's), (11, 42174), (17, 42252), (20, 42309), (25, 42381), (31, 42447), (36, 42486), (37, 42489), (41, 42519), (46, 42561), (49, 42669), (50, 42684), (74, 42906), (75, 42909), (77, 42975), (79, 42984),

Gene: King2\_60 Start: 41751, Stop: 42689, Start Num: 6

Candidate Starts for King2\_60:

(Start: 6 @41751 has 8 MA's), (Start: 7 @41766 has 1 MA's), (13, 41808), (16, 41853), (17, 41865), (20, 41922), (25, 41994), (27, 42039), (33, 42075), (34, 42093), (36, 42105), (40, 42129), (43, 42174), (44, 42213), (45, 42219), (50, 42375), (53, 42417), (65, 42471), (71, 42549), (75, 42594),

Gene: LeeroyJ\_64 Start: 42041, Stop: 42907, Start Num: 5

Candidate Starts for LeeroyJ\_64:

(2, 42026), (Start: 5 @42041 has 11 MA's), (11, 42080), (17, 42158), (18, 42176), (20, 42215), (25, 42287), (28, 42335), (39, 42404), (49, 42575), (50, 42590), (59, 42677), (63, 42680), (69, 42725), (73, 42788), (75, 42809),

Gene: Martha\_64 Start: 42232, Stop: 43113, Start Num: 9

Candidate Starts for Martha\_64:

(Start: 5 @42202 has 11 MA's), (Start: 9 @42232 has 1 MA's), (11, 42241), (20, 42376), (25, 42448), (36, 42556), (39, 42565), (41, 42589), (46, 42631), (49, 42739), (50, 42754), (56, 42826), (57, 42841), (68, 42919), (75, 43009), (78, 43078), (80, 43087),

Gene: NathanVaag\_61 Start: 41571, Stop: 42545, Start Num: 6

Candidate Starts for NathanVaag\_61:

(Start: 6 @41571 has 8 MA's), (Start: 7 @41586 has 1 MA's), (16, 41673), (20, 41742), (21, 41757), (24, 41793), (25, 41814), (27, 41859), (33, 41895), (34, 41913), (36, 41925), (43, 41994), (44, 42033), (45, 42039), (47, 42171), (48, 42174), (50, 42219), (71, 42396), (75, 42441), (77, 42507), (81, 42519),

Gene: Piccoletto\_62 Start: 41788, Stop: 42699, Start Num: 6

Candidate Starts for Piccoletto\_62:

(Start: 6 @41788 has 8 MA's), (Start: 7 @41803 has 1 MA's), (16, 41890), (17, 41902), (20, 41959), (24, 42010), (25, 42031), (27, 42076), (33, 42106), (34, 42124), (36, 42136), (43, 42205), (44, 42244), (45, 42250), (50, 42430), (53, 42472), (55, 42481), (65, 42526), (71, 42559),

Gene: Pippa\_64 Start: 42086, Stop: 42919, Start Num: 5

Candidate Starts for Pippa\_64:

(Start: 5 @42086 has 11 MA's), (11, 42125), (17, 42203), (20, 42260), (25, 42332), (31, 42398), (36, 42437), (37, 42440), (41, 42470), (46, 42512), (49, 42620), (50, 42635), (66, 42722), (67, 42731), (72, 42788), (74, 42812), (75, 42815), (78, 42884),

Gene: Shade\_64 Start: 41991, Stop: 42893, Start Num: 5

Candidate Starts for Shade\_64:

(Start: 5 @41991 has 11 MA's), (11, 42030), (17, 42108), (19, 42162), (20, 42165), (25, 42237), (31, 42303), (36, 42342), (37, 42345), (41, 42375), (46, 42417), (49, 42522), (50, 42537), (56, 42606), (57, 42627), (68, 42705), (75, 42795), (78, 42861), (81, 42870),

Gene: Sicarius2\_67 Start: 41135, Stop: 41818, Start Num: 6

Candidate Starts for Sicarius2\_67:

(1, 41096), (Start: 6 @41135 has 8 MA's), (8, 41153), (10, 41165), (12, 41174), (22, 41342), (34, 41483), (50, 41693), (51, 41696), (70, 41807),

Gene: Sonny\_63 Start: 41740, Stop: 42582, Start Num: 5

Candidate Starts for Sonny\_63:

(Start: 5 @41740 has 11 MA's), (11, 41779), (17, 41857), (20, 41914), (25, 41986), (31, 42052), (36, 42091), (37, 42094), (41, 42124), (46, 42166), (49, 42274), (50, 42289), (58, 42358), (66, 42376), (74, 42466), (75, 42469), (77, 42535), (79, 42544),

Gene: StevieBAY\_64 Start: 42305, Stop: 43225, Start Num: 4

Candidate Starts for StevieBAY\_64:

(2, 42290), (Start: 4 @42305 has 2 MA's), (13, 42377), (14, 42386), (15, 42395), (17, 42434), (18, 42452), (23, 42527), (25, 42563), (26, 42566), (29, 42620), (30, 42626), (35, 42665), (38, 42680), (49, 42890), (50, 42905), (59, 42995), (63, 42998), (69, 43043), (73, 43106), (75, 43127),

Gene: TaeYoung\_65 Start: 42175, Stop: 43086, Start Num: 5

Candidate Starts for TaeYoung\_65:

(Start: 5 @42175 has 11 MA's), (Start: 9 @42205 has 1 MA's), (11, 42214), (17, 42292), (20, 42349), (25, 42421), (36, 42529), (39, 42538), (41, 42562), (46, 42604), (49, 42712), (50, 42727), (56, 42799), (57, 42814), (68, 42892), (75, 42982), (78, 43051), (80, 43060),

Gene: Timinator\_64 Start: 42154, Stop: 43020, Start Num: 5

Candidate Starts for Timinator\_64:

(2, 42139), (Start: 5 @42154 has 11 MA's), (11, 42193), (17, 42271), (18, 42289), (20, 42328), (25, 42400), (28, 42448), (39, 42517), (49, 42688), (50, 42703), (59, 42790), (63, 42793), (69, 42838), (73, 42901), (75, 42922),

Gene: Wyborn\_66 Start: 41834, Stop: 42517, Start Num: 6

Candidate Starts for Wyborn\_66:

(1, 41795), (Start: 6 @41834 has 8 MA's), (8, 41852), (10, 41864), (12, 41873), (22, 42041), (26, 42086), (34, 42182), (40, 42218), (50, 42392), (51, 42395), (53, 42434), (70, 42506),

Gene: Zartrosa\_64 Start: 42038, Stop: 42904, Start Num: 5

Candidate Starts for Zartrosa\_64:

(Start: 5 @42038 has 11 MA's), (11, 42077), (17, 42155), (19, 42209), (20, 42212), (25, 42284), (31, 42350), (36, 42389), (37, 42392), (41, 42422), (46, 42464), (49, 42572), (50, 42587), (62, 42674), (63, 42677), (69, 42722), (75, 42806), (78, 42872), (81, 42881),