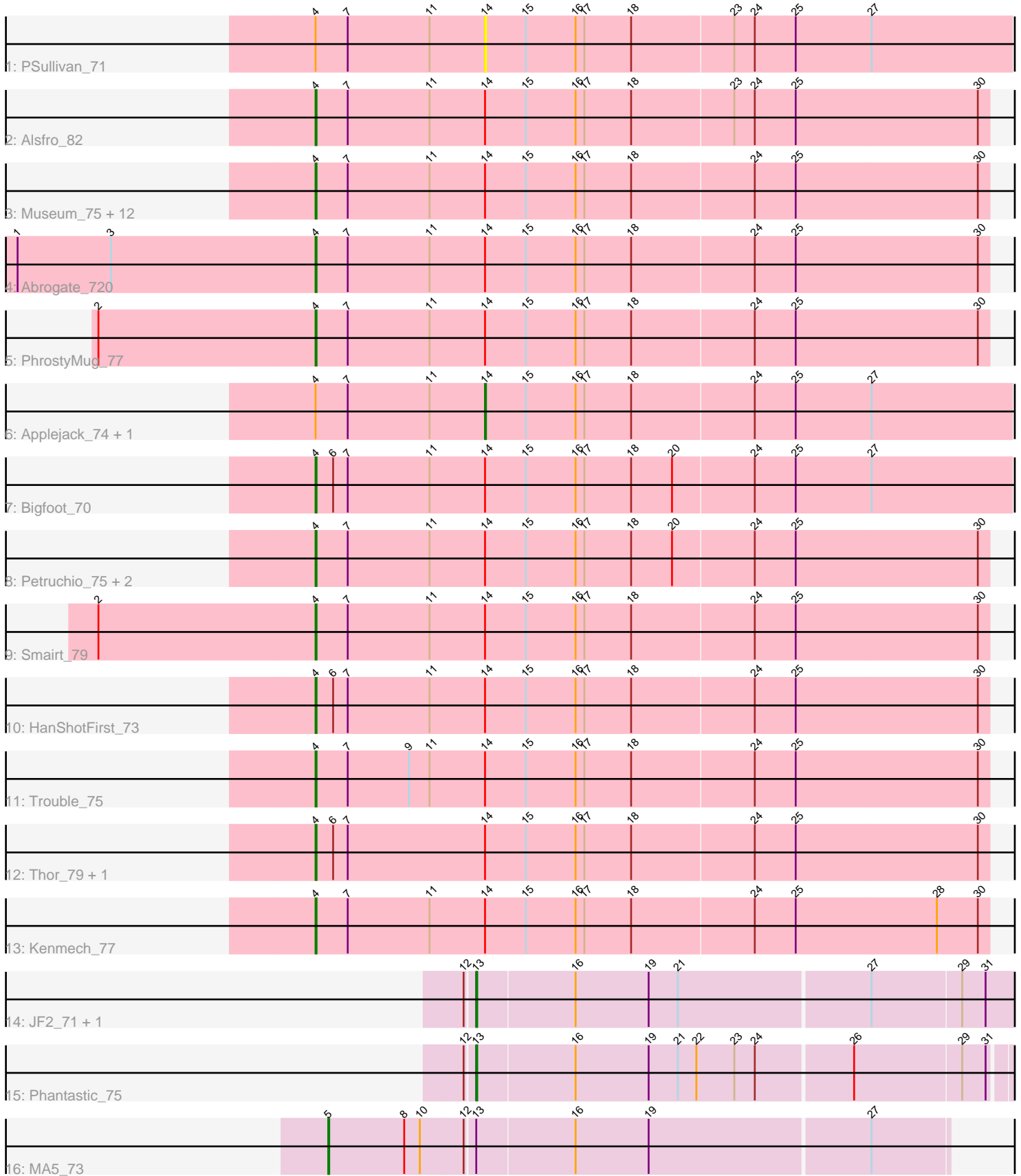


Pham 158060



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 158060 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158060 has 33 members, 2 are drafts.

Phages represented in each track:

- Track 1 : PSullivan_71
- Track 2 : Alsfro_82
- Track 3 : Museum_75, Crispicious1_70, PacerPaul_80, Manatee_73, Arcanine_79, Bircsak_76, Makemake_78, Peterson_74, SkiPole_84, Turj99_71, Magnito_74, Switzer_74, Norz_71
- Track 4 : Abrogate_720
- Track 5 : PhrostyMug_77
- Track 6 : Applejack_74, KBG_73
- Track 7 : Bigfoot_70
- Track 8 : Petruchio_75, Gyzlar_68, Maroc7_77
- Track 9 : Smairt_79
- Track 10 : HanShotFirst_73
- Track 11 : Trouble_75
- Track 12 : Thor_79, SarFire_79
- Track 13 : Kenmech_77
- Track 14 : JF2_71, JF4_71
- Track 15 : Phantastic_75
- Track 16 : MA5_73

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

The start number called the most often in the published annotations is 4, it was called in 26 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abrogate_720, Alsfro_82, Arcanine_79, Bigfoot_70, Bircsak_76, Crispicious1_70, Gyzlar_68, HanShotFirst_73, Kenmech_77, Magnito_74, Makemake_78, Manatee_73, Maroc7_77, Museum_75, Norz_71, PacerPaul_80, Peterson_74, Petruchio_75, PhrostyMug_77, SarFire_79, SkiPole_84, Smairt_79, Switzer_74, Thor_79, Trouble_75, Turj99_71,

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

- Applejack_74, KBG_73, PSullivan_71,

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

- JF2_71, JF4_71, MA5_73, Phantastic_75,

Summary by start number:

Start 4:

- Found in 29 of 33 (87.9%) of genes in pham
- Manual Annotations of this start: 26 of 31
- Called 89.7% of time when present
- Phage (with cluster) where this start called: Abrogate_720 (A1), Alsfro_82 (A1), Arcanine_79 (A1), Bigfoot_70 (A1), Bircsak_76 (A1), Crispicious1_70 (A1), Gyzlar_68 (A1), HanShotFirst_73 (A1), Kenmech_77 (A1), Magnito_74 (A1), Makemake_78 (A1), Manatee_73 (A1), Maroc7_77 (A1), Museum_75 (A1), Norz_71 (A1), PacerPaul_80 (A1), Peterson_74 (A1), Petruccio_75 (A1), PhrostyMug_77 (A1), SarFire_79 (A1), SkiPole_84 (A1), Smairt_79 (A1), Switzer_74 (A1), Thor_79 (A1), Trouble_75 (A1), Turj99_71 (A1),

Start 5:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MA5_73 (A3),

Start 13:

- Found in 4 of 33 (12.1%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 75.0% of time when present
- Phage (with cluster) where this start called: JF2_71 (A3), JF4_71 (A3), Phantastic_75 (A3),

Start 14:

- Found in 29 of 33 (87.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 10.3% of time when present
- Phage (with cluster) where this start called: Applejack_74 (A1), KBG_73 (A1), PSullivan_71 (A1),

Summary by clusters:

There are 2 clusters represented in this pham: A1, A3,

Info for manual annotations of cluster A1:

- Start number 4 was manually annotated 26 times for cluster A1.
- Start number 14 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A3:

- Start number 5 was manually annotated 1 time for cluster A3.
- Start number 13 was manually annotated 3 times for cluster A3.

Gene Information:

Gene: Abrogate_720 Start: 46995, Stop: 46309, Start Num: 4

Candidate Starts for Abrogate_720:

(1, 47301), (3, 47205), (Start: 4 @46995 has 26 MA's), (7, 46962), (11, 46878), (Start: 14 @46821 has 1 MA's), (15, 46779), (16, 46728), (17, 46719), (18, 46671), (24, 46548), (25, 46506), (30, 46320),

Gene: Alsfro_82 Start: 47015, Stop: 46329, Start Num: 4

Candidate Starts for Alsfro_82:

(Start: 4 @47015 has 26 MA's), (7, 46982), (11, 46898), (Start: 14 @46841 has 1 MA's), (15, 46799), (16, 46748), (17, 46739), (18, 46691), (23, 46589), (24, 46568), (25, 46526), (30, 46340),

Gene: Applejack_74 Start: 44460, Stop: 43924, Start Num: 14

Candidate Starts for Applejack_74:

(Start: 4 @44634 has 26 MA's), (7, 44601), (11, 44517), (Start: 14 @44460 has 1 MA's), (15, 44418), (16, 44367), (17, 44358), (18, 44310), (24, 44187), (25, 44145), (27, 44067),

Gene: Arcanine_79 Start: 48385, Stop: 47699, Start Num: 4

Candidate Starts for Arcanine_79:

(Start: 4 @48385 has 26 MA's), (7, 48352), (11, 48268), (Start: 14 @48211 has 1 MA's), (15, 48169), (16, 48118), (17, 48109), (18, 48061), (24, 47938), (25, 47896), (30, 47710),

Gene: Bigfoot_70 Start: 46517, Stop: 45807, Start Num: 4

Candidate Starts for Bigfoot_70:

(Start: 4 @46517 has 26 MA's), (6, 46499), (7, 46484), (11, 46400), (Start: 14 @46343 has 1 MA's), (15, 46301), (16, 46250), (17, 46241), (18, 46193), (20, 46151), (24, 46070), (25, 46028), (27, 45950),

Gene: Bircsak_76 Start: 49112, Stop: 48426, Start Num: 4

Candidate Starts for Bircsak_76:

(Start: 4 @49112 has 26 MA's), (7, 49079), (11, 48995), (Start: 14 @48938 has 1 MA's), (15, 48896), (16, 48845), (17, 48836), (18, 48788), (24, 48665), (25, 48623), (30, 48437),

Gene: Crispicous1_70 Start: 44651, Stop: 43965, Start Num: 4

Candidate Starts for Crispicous1_70:

(Start: 4 @44651 has 26 MA's), (7, 44618), (11, 44534), (Start: 14 @44477 has 1 MA's), (15, 44435), (16, 44384), (17, 44375), (18, 44327), (24, 44204), (25, 44162), (30, 43976),

Gene: Gyzlar_68 Start: 43426, Stop: 42740, Start Num: 4

Candidate Starts for Gyzlar_68:

(Start: 4 @43426 has 26 MA's), (7, 43393), (11, 43309), (Start: 14 @43252 has 1 MA's), (15, 43210), (16, 43159), (17, 43150), (18, 43102), (20, 43060), (24, 42979), (25, 42937), (30, 42751),

Gene: HanShotFirst_73 Start: 47020, Stop: 46334, Start Num: 4

Candidate Starts for HanShotFirst_73:

(Start: 4 @47020 has 26 MA's), (6, 47002), (7, 46987), (11, 46903), (Start: 14 @46846 has 1 MA's), (15, 46804), (16, 46753), (17, 46744), (18, 46696), (24, 46573), (25, 46531), (30, 46345),

Gene: JF2_71 Start: 42870, Stop: 42328, Start Num: 13

Candidate Starts for JF2_71:

(12, 42879), (Start: 13 @42870 has 3 MA's), (16, 42771), (19, 42696), (21, 42666), (27, 42474), (29, 42384), (31, 42360),

Gene: JF4_71 Start: 42870, Stop: 42328, Start Num: 13

Candidate Starts for JF4_71:

(12, 42879), (Start: 13 @42870 has 3 MA's), (16, 42771), (19, 42696), (21, 42666), (27, 42474), (29, 42384), (31, 42360),

Gene: KBG_73 Start: 47323, Stop: 46787, Start Num: 14

Candidate Starts for KBG_73:

(Start: 4 @47497 has 26 MA's), (7, 47464), (11, 47380), (Start: 14 @47323 has 1 MA's), (15, 47281), (16, 47230), (17, 47221), (18, 47173), (24, 47050), (25, 47008), (27, 46930),

Gene: Kenmech_77 Start: 47527, Stop: 46841, Start Num: 4

Candidate Starts for Kenmech_77:

(Start: 4 @47527 has 26 MA's), (7, 47494), (11, 47410), (Start: 14 @47353 has 1 MA's), (15, 47311), (16, 47260), (17, 47251), (18, 47203), (24, 47080), (25, 47038), (28, 46894), (30, 46852),

Gene: MA5_73 Start: 44223, Stop: 43606, Start Num: 5

Candidate Starts for MA5_73:

(Start: 5 @44223 has 1 MA's), (8, 44145), (10, 44130), (12, 44088), (Start: 13 @44079 has 3 MA's), (16, 43980), (19, 43905), (27, 43683),

Gene: Magnito_74 Start: 45855, Stop: 45169, Start Num: 4

Candidate Starts for Magnito_74:

(Start: 4 @45855 has 26 MA's), (7, 45822), (11, 45738), (Start: 14 @45681 has 1 MA's), (15, 45639), (16, 45588), (17, 45579), (18, 45531), (24, 45408), (25, 45366), (30, 45180),

Gene: Makemake_78 Start: 47465, Stop: 46779, Start Num: 4

Candidate Starts for Makemake_78:

(Start: 4 @47465 has 26 MA's), (7, 47432), (11, 47348), (Start: 14 @47291 has 1 MA's), (15, 47249), (16, 47198), (17, 47189), (18, 47141), (24, 47018), (25, 46976), (30, 46790),

Gene: Manatee_73 Start: 45395, Stop: 44709, Start Num: 4

Candidate Starts for Manatee_73:

(Start: 4 @45395 has 26 MA's), (7, 45362), (11, 45278), (Start: 14 @45221 has 1 MA's), (15, 45179), (16, 45128), (17, 45119), (18, 45071), (24, 44948), (25, 44906), (30, 44720),

Gene: Maroc7_77 Start: 48458, Stop: 47772, Start Num: 4

Candidate Starts for Maroc7_77:

(Start: 4 @48458 has 26 MA's), (7, 48425), (11, 48341), (Start: 14 @48284 has 1 MA's), (15, 48242), (16, 48191), (17, 48182), (18, 48134), (20, 48092), (24, 48011), (25, 47969), (30, 47783),

Gene: Museum_75 Start: 47134, Stop: 46448, Start Num: 4

Candidate Starts for Museum_75:

(Start: 4 @47134 has 26 MA's), (7, 47101), (11, 47017), (Start: 14 @46960 has 1 MA's), (15, 46918), (16, 46867), (17, 46858), (18, 46810), (24, 46687), (25, 46645), (30, 46459),

Gene: Norz_71 Start: 47607, Stop: 46921, Start Num: 4

Candidate Starts for Norz_71:

(Start: 4 @47607 has 26 MA's), (7, 47574), (11, 47490), (Start: 14 @47433 has 1 MA's), (15, 47391), (16, 47340), (17, 47331), (18, 47283), (24, 47160), (25, 47118), (30, 46932),

Gene: PSullivan_71 Start: 45043, Stop: 44507, Start Num: 14

Candidate Starts for PSullivan_71:

(Start: 4 @45217 has 26 MA's), (7, 45184), (11, 45100), (Start: 14 @45043 has 1 MA's), (15, 45001), (16, 44950), (17, 44941), (18, 44893), (23, 44791), (24, 44770), (25, 44728), (27, 44650),

Gene: PacerPaul_80 Start: 48480, Stop: 47794, Start Num: 4

Candidate Starts for PacerPaul_80:

(Start: 4 @48480 has 26 MA's), (7, 48447), (11, 48363), (Start: 14 @48306 has 1 MA's), (15, 48264), (16, 48213), (17, 48204), (18, 48156), (24, 48033), (25, 47991), (30, 47805),

Gene: Peterson_74 Start: 47439, Stop: 46753, Start Num: 4

Candidate Starts for Peterson_74:

(Start: 4 @47439 has 26 MA's), (7, 47406), (11, 47322), (Start: 14 @47265 has 1 MA's), (15, 47223), (16, 47172), (17, 47163), (18, 47115), (24, 46992), (25, 46950), (30, 46764),

Gene: Petruccio_75 Start: 45700, Stop: 45014, Start Num: 4

Candidate Starts for Petruccio_75:

(Start: 4 @45700 has 26 MA's), (7, 45667), (11, 45583), (Start: 14 @45526 has 1 MA's), (15, 45484), (16, 45433), (17, 45424), (18, 45376), (20, 45334), (24, 45253), (25, 45211), (30, 45025),

Gene: Phantastic_75 Start: 44335, Stop: 43802, Start Num: 13

Candidate Starts for Phantastic_75:

(12, 44344), (Start: 13 @44335 has 3 MA's), (16, 44236), (19, 44161), (21, 44131), (22, 44113), (23, 44074), (24, 44053), (26, 43957), (29, 43849), (31, 43825),

Gene: PhrostyMug_77 Start: 48272, Stop: 47586, Start Num: 4

Candidate Starts for PhrostyMug_77:

(2, 48494), (Start: 4 @48272 has 26 MA's), (7, 48239), (11, 48155), (Start: 14 @48098 has 1 MA's), (15, 48056), (16, 48005), (17, 47996), (18, 47948), (24, 47825), (25, 47783), (30, 47597),

Gene: SarFire_79 Start: 48509, Stop: 47823, Start Num: 4

Candidate Starts for SarFire_79:

(Start: 4 @48509 has 26 MA's), (6, 48491), (7, 48476), (Start: 14 @48335 has 1 MA's), (15, 48293), (16, 48242), (17, 48233), (18, 48185), (24, 48062), (25, 48020), (30, 47834),

Gene: SkiPole_84 Start: 47837, Stop: 47151, Start Num: 4

Candidate Starts for SkiPole_84:

(Start: 4 @47837 has 26 MA's), (7, 47804), (11, 47720), (Start: 14 @47663 has 1 MA's), (15, 47621), (16, 47570), (17, 47561), (18, 47513), (24, 47390), (25, 47348), (30, 47162),

Gene: Smairt_79 Start: 49288, Stop: 48602, Start Num: 4

Candidate Starts for Smairt_79:

(2, 49510), (Start: 4 @49288 has 26 MA's), (7, 49255), (11, 49171), (Start: 14 @49114 has 1 MA's), (15, 49072), (16, 49021), (17, 49012), (18, 48964), (24, 48841), (25, 48799), (30, 48613),

Gene: Switzer_74 Start: 46808, Stop: 46122, Start Num: 4

Candidate Starts for Switzer_74:

(Start: 4 @46808 has 26 MA's), (7, 46775), (11, 46691), (Start: 14 @46634 has 1 MA's), (15, 46592), (16, 46541), (17, 46532), (18, 46484), (24, 46361), (25, 46319), (30, 46133),

Gene: Thor_79 Start: 47867, Stop: 47181, Start Num: 4

Candidate Starts for Thor_79:

(Start: 4 @47867 has 26 MA's), (6, 47849), (7, 47834), (Start: 14 @47693 has 1 MA's), (15, 47651), (16, 47600), (17, 47591), (18, 47543), (24, 47420), (25, 47378), (30, 47192),

Gene: Trouble_75 Start: 46975, Stop: 46289, Start Num: 4

Candidate Starts for Trouble_75:

(Start: 4 @46975 has 26 MA's), (7, 46942), (9, 46879), (11, 46858), (Start: 14 @46801 has 1 MA's), (15, 46759), (16, 46708), (17, 46699), (18, 46651), (24, 46528), (25, 46486), (30, 46300),

Gene: Turj99_71 Start: 46466, Stop: 45780, Start Num: 4

Candidate Starts for Turj99_71:

(Start: 4 @46466 has 26 MA's), (7, 46433), (11, 46349), (Start: 14 @46292 has 1 MA's), (15, 46250), (16, 46199), (17, 46190), (18, 46142), (24, 46019), (25, 45977), (30, 45791),