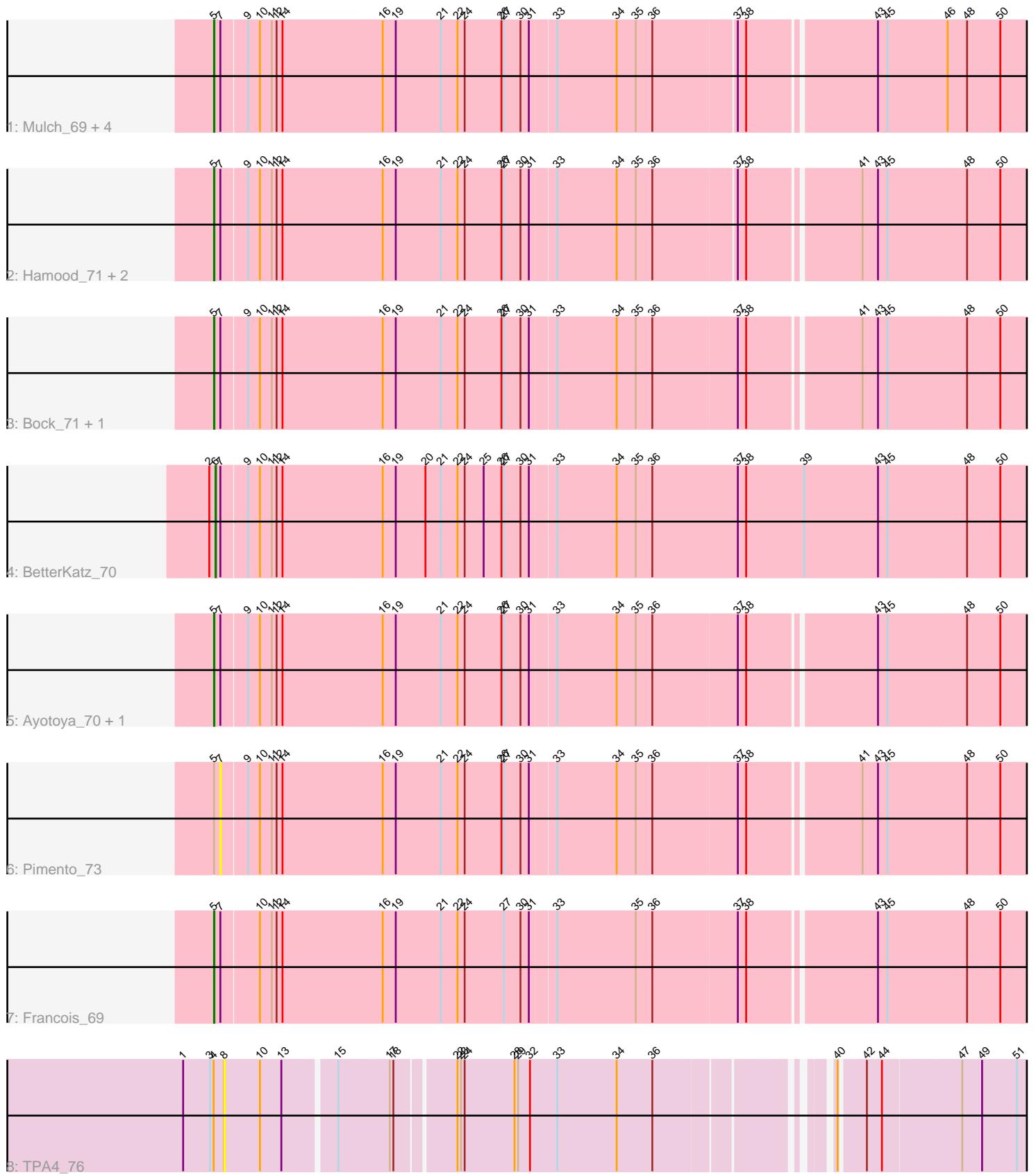


Zoomed Pham 4511



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 4511 Report

This analysis was run 04/05/24 on database version 557.

Pham number 4511 has 16 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mulch_69, Parada_69, WheatThin_68, Nadeem_69, Brylie_69
- Track 2 : Hamood_71, Chop_71, GrandSlam_71
- Track 3 : Bock_71, NancyRae_68
- Track 4 : BetterKatz_70
- Track 5 : Ayotoya_70, DelRio_70
- Track 6 : Pimento_73
- Track 7 : Francois_69
- Track 8 : TPA4_76

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 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayotoya_70, Bock_71, Brylie_69, Chop_71, DelRio_70, Francois_69, GrandSlam_71, Hamood_71, Mulch_69, Nadeem_69, NancyRae_68, Parada_69, WheatThin_68,

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

- Pimento_73,

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

- BetterKatz_70, TPA4_76,

Summary by start number:

Start 5:

- Found in 14 of 16 (87.5%) of genes in pham
- Manual Annotations of this start: 12 of 13
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Ayotoya_70 (DI), Bock_71 (DI), Brylie_69 (DI), Chop_71 (DI), DelRio_70 (DI), Francois_69 (DI), GrandSlam_71 (DI), Hamood_71 (DI), Mulch_69 (DI), Nadeem_69 (DI), NancyRae_68 (DI), Parada_69

(DI), WheatThin_68 (DI),

Start 6:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BetterKatz_70 (DI),

Start 7:

- Found in 15 of 16 (93.8%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Pimento_73 (DI),

Start 8:

- Found in 1 of 16 (6.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_76 (singleton),

Summary by clusters:

There are 2 clusters represented in this pham: singleton, DI,

Info for manual annotations of cluster DI:

- Start number 5 was manually annotated 12 times for cluster DI.
- Start number 6 was manually annotated 1 time for cluster DI.

Gene Information:

Gene: Ayotoya_70 Start: 44844, Stop: 47666, Start Num: 5

Candidate Starts for Ayotoya_70:

(Start: 5 @44844 has 12 MA's), (7, 44856), (9, 44913), (10, 44943), (11, 44973), (12, 44985), (14, 45000), (16, 45249), (19, 45282), (21, 45396), (22, 45438), (24, 45456), (26, 45549), (27, 45555), (30, 45597), (31, 45618), (33, 45678), (34, 45828), (35, 45876), (36, 45918), (37, 46128), (38, 46149), (43, 46449), (45, 46473), (48, 46671), (50, 46755), (54, 46893), (55, 46896), (56, 46905), (58, 47088), (64, 47307), (65, 47313), (66, 47316), (67, 47340), (68, 47343), (69, 47466), (70, 47469), (72, 47517), (73, 47520), (74, 47529), (75, 47640), (76, 47655),

Gene: BetterKatz_70 Start: 44432, Stop: 47293, Start Num: 6

Candidate Starts for BetterKatz_70:

(2, 44417), (Start: 6 @44432 has 1 MA's), (7, 44444), (9, 44501), (10, 44531), (11, 44561), (12, 44573), (14, 44588), (16, 44837), (19, 44870), (20, 44945), (21, 44984), (22, 45026), (24, 45044), (25, 45092), (26, 45137), (27, 45143), (30, 45185), (31, 45206), (33, 45266), (34, 45416), (35, 45464), (36, 45506), (37, 45722), (38, 45743), (39, 45890), (43, 46076), (45, 46100), (48, 46298), (50, 46382), (54, 46520), (55, 46523), (56, 46532), (58, 46715), (62, 46892), (64, 46934), (65, 46940), (66, 46943), (67, 46967), (68, 46970), (69, 47093), (70, 47096), (72, 47144), (73, 47147), (74, 47156), (75, 47267), (76, 47282),

Gene: Bock_71 Start: 44188, Stop: 47010, Start Num: 5

Candidate Starts for Bock_71:

(Start: 5 @44188 has 12 MA's), (7, 44200), (9, 44257), (10, 44287), (11, 44317), (12, 44329), (14, 44344), (16, 44593), (19, 44626), (21, 44740), (22, 44782), (24, 44800), (26, 44893), (27, 44899), (30, 44941), (31, 44962), (33, 45022), (34, 45172), (35, 45220), (36, 45262), (37, 45472), (38, 45493), (41, 45754), (43, 45793), (45, 45817), (48, 46015), (50, 46099), (54, 46237), (55, 46240), (56, 46249), (58, 46432), (62, 46609), (64, 46651), (65, 46657), (66, 46660), (67, 46684), (68, 46687), (69, 46810), (70, 46813), (72, 46861), (73, 46864), (74, 46873), (75, 46984), (76, 46999),

Gene: Brylie_69 Start: 43767, Stop: 46580, Start Num: 5

Candidate Starts for Brylie_69:

(Start: 5 @43767 has 12 MA's), (7, 43779), (9, 43836), (10, 43866), (11, 43896), (12, 43908), (14, 43923), (16, 44172), (19, 44205), (21, 44319), (22, 44361), (24, 44379), (26, 44472), (27, 44478), (30, 44520), (31, 44541), (33, 44601), (34, 44751), (35, 44799), (36, 44841), (37, 45042), (38, 45063), (43, 45363), (45, 45387), (46, 45537), (48, 45585), (50, 45669), (54, 45807), (55, 45810), (56, 45819), (58, 46002), (62, 46179), (64, 46221), (65, 46227), (66, 46230), (67, 46254), (68, 46257), (69, 46380), (70, 46383), (72, 46431), (73, 46434), (74, 46443), (75, 46554), (76, 46569),

Gene: Chop_71 Start: 45032, Stop: 47845, Start Num: 5

Candidate Starts for Chop_71:

(Start: 5 @45032 has 12 MA's), (7, 45044), (9, 45101), (10, 45131), (11, 45161), (12, 45173), (14, 45188), (16, 45437), (19, 45470), (21, 45584), (22, 45626), (24, 45644), (26, 45737), (27, 45743), (30, 45785), (31, 45806), (33, 45866), (34, 46016), (35, 46064), (36, 46106), (37, 46307), (38, 46328), (41, 46589), (43, 46628), (45, 46652), (48, 46850), (50, 46934), (54, 47072), (55, 47075), (56, 47084), (58, 47267), (64, 47486), (65, 47492), (66, 47495), (67, 47519), (68, 47522), (69, 47645), (70, 47648), (72, 47696), (73, 47699), (74, 47708), (75, 47819), (76, 47834),

Gene: DelRio_70 Start: 44954, Stop: 47776, Start Num: 5

Candidate Starts for DelRio_70:

(Start: 5 @44954 has 12 MA's), (7, 44966), (9, 45023), (10, 45053), (11, 45083), (12, 45095), (14, 45110), (16, 45359), (19, 45392), (21, 45506), (22, 45548), (24, 45566), (26, 45659), (27, 45665), (30, 45707), (31, 45728), (33, 45788), (34, 45938), (35, 45986), (36, 46028), (37, 46238), (38, 46259), (43, 46559), (45, 46583), (48, 46781), (50, 46865), (54, 47003), (55, 47006), (56, 47015), (58, 47198), (64, 47417), (65, 47423), (66, 47426), (67, 47450), (68, 47453), (69, 47576), (70, 47579), (72, 47627), (73, 47630), (74, 47639), (75, 47750), (76, 47765),

Gene: Francois_69 Start: 44052, Stop: 46874, Start Num: 5

Candidate Starts for Francois_69:

(Start: 5 @44052 has 12 MA's), (7, 44064), (10, 44151), (11, 44181), (12, 44193), (14, 44208), (16, 44457), (19, 44490), (21, 44604), (22, 44646), (24, 44664), (27, 44763), (30, 44805), (31, 44826), (33, 44886), (35, 45084), (36, 45126), (37, 45336), (38, 45357), (43, 45657), (45, 45681), (48, 45879), (50, 45963), (54, 46101), (55, 46104), (56, 46113), (58, 46296), (64, 46515), (65, 46521), (66, 46524), (67, 46548), (68, 46551), (69, 46674), (70, 46677), (72, 46725), (73, 46728), (74, 46737), (76, 46863),

Gene: GrandSlam_71 Start: 45032, Stop: 47845, Start Num: 5

Candidate Starts for GrandSlam_71:

(Start: 5 @45032 has 12 MA's), (7, 45044), (9, 45101), (10, 45131), (11, 45161), (12, 45173), (14, 45188), (16, 45437), (19, 45470), (21, 45584), (22, 45626), (24, 45644), (26, 45737), (27, 45743), (30, 45785), (31, 45806), (33, 45866), (34, 46016), (35, 46064), (36, 46106), (37, 46307), (38, 46328), (41, 46589), (43, 46628), (45, 46652), (48, 46850), (50, 46934), (54, 47072), (55, 47075), (56, 47084), (58, 47267), (64, 47486), (65, 47492), (66, 47495), (67, 47519), (68, 47522), (69, 47645), (70, 47648), (72, 47696), (73, 47699), (74, 47708), (75, 47819), (76, 47834),

Gene: Hamood_71 Start: 45032, Stop: 47845, Start Num: 5

Candidate Starts for Hamood_71:

(Start: 5 @45032 has 12 MA's), (7, 45044), (9, 45101), (10, 45131), (11, 45161), (12, 45173), (14, 45188), (16, 45437), (19, 45470), (21, 45584), (22, 45626), (24, 45644), (26, 45737), (27, 45743), (30, 45785), (31, 45806), (33, 45866), (34, 46016), (35, 46064), (36, 46106), (37, 46307), (38, 46328), (41, 46589), (43, 46628), (45, 46652), (48, 46850), (50, 46934), (54, 47072), (55, 47075), (56, 47084), (58, 47267), (64, 47486), (65, 47492), (66, 47495), (67, 47519), (68, 47522), (69, 47645), (70, 47648), (72, 47696), (73, 47699), (74, 47708), (75, 47819), (76, 47834),

Gene: Mulch_69 Start: 43767, Stop: 46580, Start Num: 5

Candidate Starts for Mulch_69:

(Start: 5 @43767 has 12 MA's), (7, 43779), (9, 43836), (10, 43866), (11, 43896), (12, 43908), (14, 43923), (16, 44172), (19, 44205), (21, 44319), (22, 44361), (24, 44379), (26, 44472), (27, 44478), (30, 44520), (31, 44541), (33, 44601), (34, 44751), (35, 44799), (36, 44841), (37, 45042), (38, 45063), (43, 45363), (45, 45387), (46, 45537), (48, 45585), (50, 45669), (54, 45807), (55, 45810), (56, 45819), (58, 46002), (62, 46179), (64, 46221), (65, 46227), (66, 46230), (67, 46254), (68, 46257), (69, 46380), (70, 46383), (72, 46431), (73, 46434), (74, 46443), (75, 46554), (76, 46569),

Gene: Nadeem_69 Start: 43755, Stop: 46568, Start Num: 5

Candidate Starts for Nadeem_69:

(Start: 5 @43755 has 12 MA's), (7, 43767), (9, 43824), (10, 43854), (11, 43884), (12, 43896), (14, 43911), (16, 44160), (19, 44193), (21, 44307), (22, 44349), (24, 44367), (26, 44460), (27, 44466), (30, 44508), (31, 44529), (33, 44589), (34, 44739), (35, 44787), (36, 44829), (37, 45030), (38, 45051), (43, 45351), (45, 45375), (46, 45525), (48, 45573), (50, 45657), (54, 45795), (55, 45798), (56, 45807), (58, 45990), (62, 46167), (64, 46209), (65, 46215), (66, 46218), (67, 46242), (68, 46245), (69, 46368), (70, 46371), (72, 46419), (73, 46422), (74, 46431), (75, 46542), (76, 46557),

Gene: NancyRae_68 Start: 43804, Stop: 46617, Start Num: 5

Candidate Starts for NancyRae_68:

(Start: 5 @43804 has 12 MA's), (7, 43816), (9, 43873), (10, 43903), (11, 43933), (12, 43945), (14, 43960), (16, 44209), (19, 44242), (21, 44356), (22, 44398), (24, 44416), (26, 44509), (27, 44515), (30, 44557), (31, 44578), (33, 44638), (34, 44788), (35, 44836), (36, 44878), (37, 45079), (38, 45100), (41, 45361), (43, 45400), (45, 45424), (48, 45622), (50, 45706), (54, 45844), (55, 45847), (56, 45856), (58, 46039), (62, 46216), (64, 46258), (65, 46264), (66, 46267), (67, 46291), (68, 46294), (69, 46417), (70, 46420), (72, 46468), (73, 46471), (74, 46480), (75, 46591), (76, 46606),

Gene: Parada_69 Start: 43767, Stop: 46580, Start Num: 5

Candidate Starts for Parada_69:

(Start: 5 @43767 has 12 MA's), (7, 43779), (9, 43836), (10, 43866), (11, 43896), (12, 43908), (14, 43923), (16, 44172), (19, 44205), (21, 44319), (22, 44361), (24, 44379), (26, 44472), (27, 44478), (30, 44520), (31, 44541), (33, 44601), (34, 44751), (35, 44799), (36, 44841), (37, 45042), (38, 45063), (43, 45363), (45, 45387), (46, 45537), (48, 45585), (50, 45669), (54, 45807), (55, 45810), (56, 45819), (58, 46002), (62, 46179), (64, 46221), (65, 46227), (66, 46230), (67, 46254), (68, 46257), (69, 46380), (70, 46383), (72, 46431), (73, 46434), (74, 46443), (75, 46554), (76, 46569),

Gene: Pimento_73 Start: 43898, Stop: 46708, Start Num: 7

Candidate Starts for Pimento_73:

(Start: 5 @43886 has 12 MA's), (7, 43898), (9, 43955), (10, 43985), (11, 44015), (12, 44027), (14, 44042), (16, 44291), (19, 44324), (21, 44438), (22, 44480), (24, 44498), (26, 44591), (27, 44597), (30, 44639), (31, 44660), (33, 44720), (34, 44870), (35, 44918), (36, 44960), (37, 45170), (38, 45191), (41, 45452), (43, 45491), (45, 45515), (48, 45713), (50, 45797), (54, 45935), (55, 45938), (56, 45947), (58, 46130), (64, 46349), (65, 46355), (66, 46358), (67, 46382), (68, 46385), (69, 46508), (70, 46511), (72, 46559), (73, 46562), (74, 46571), (75, 46682), (76, 46697),

Gene: TPA4_76 Start: 49037, Stop: 51694, Start Num: 8

Candidate Starts for TPA4_76:

(1, 48935), (3, 49001), (4, 49010), (8, 49037), (10, 49127), (13, 49181), (15, 49304), (17, 49430), (18, 49439), (22, 49577), (23, 49586), (24, 49595), (28, 49721), (29, 49730), (32, 49760), (33, 49829), (34, 49979), (36, 50069), (40, 50408), (42, 50462), (44, 50498), (47, 50687), (49, 50729), (51, 50816), (52, 50876), (53, 50882), (55, 50912), (56, 50921), (57, 51083), (59, 51140), (60, 51146), (61, 51194), (63, 51332), (64, 51338), (71, 51506),

Gene: WheatThin_68 Start: 43755, Stop: 46568, Start Num: 5

Candidate Starts for WheatThin_68:

(Start: 5 @43755 has 12 MA's), (7, 43767), (9, 43824), (10, 43854), (11, 43884), (12, 43896), (14, 43911), (16, 44160), (19, 44193), (21, 44307), (22, 44349), (24, 44367), (26, 44460), (27, 44466), (30, 44508), (31, 44529), (33, 44589), (34, 44739), (35, 44787), (36, 44829), (37, 45030), (38, 45051), (43, 45351), (45, 45375), (46, 45525), (48, 45573), (50, 45657), (54, 45795), (55, 45798), (56, 45807), (58, 45990), (62, 46167), (64, 46209), (65, 46215), (66, 46218), (67, 46242), (68, 46245), (69, 46368), (70, 46371), (72, 46419), (73, 46422), (74, 46431), (75, 46542), (76, 46557),