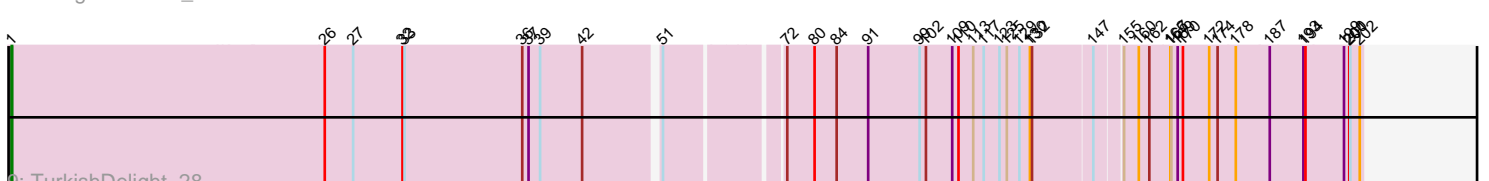
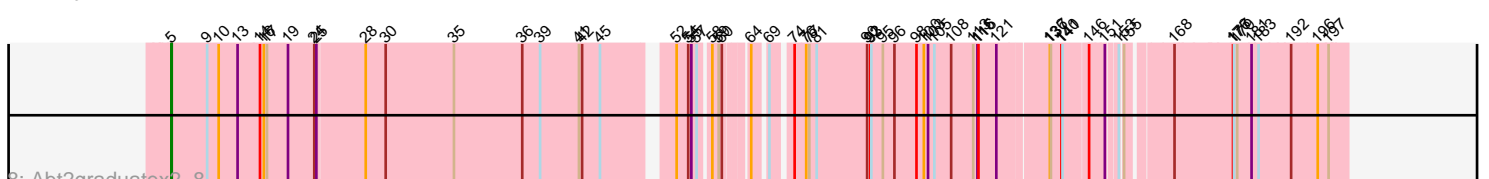
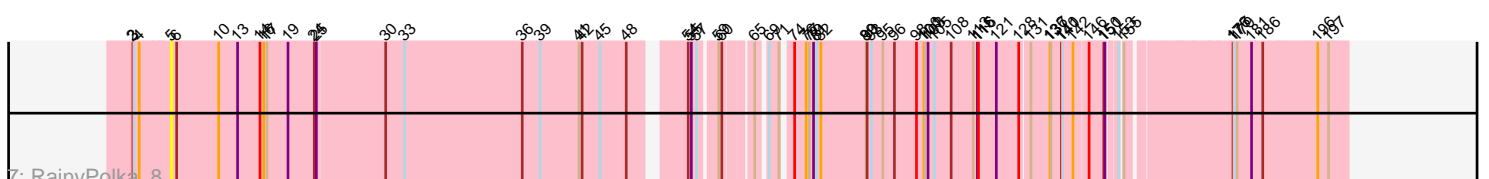
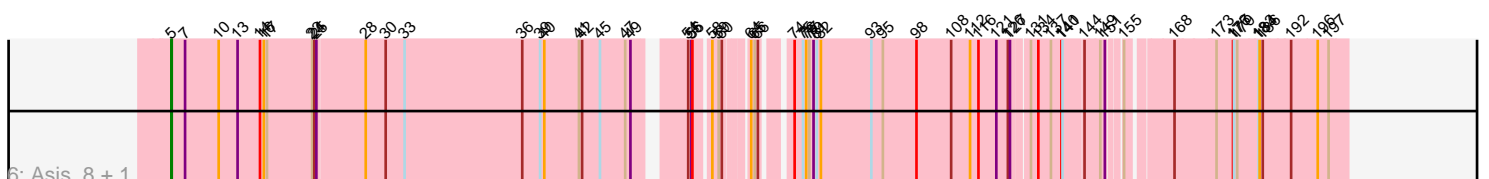
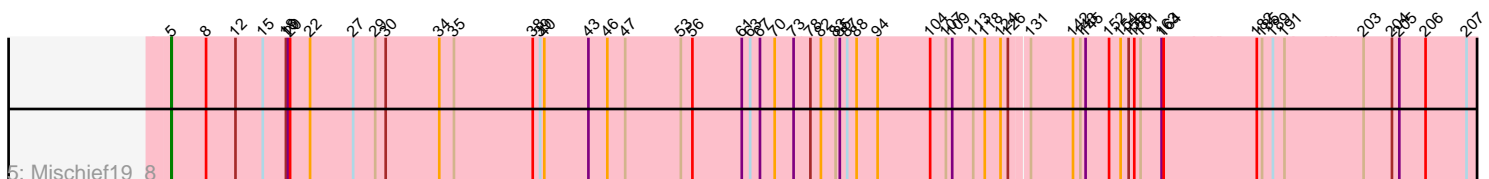
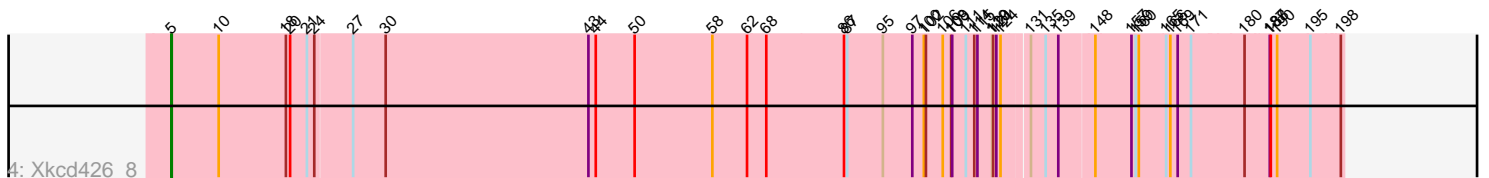
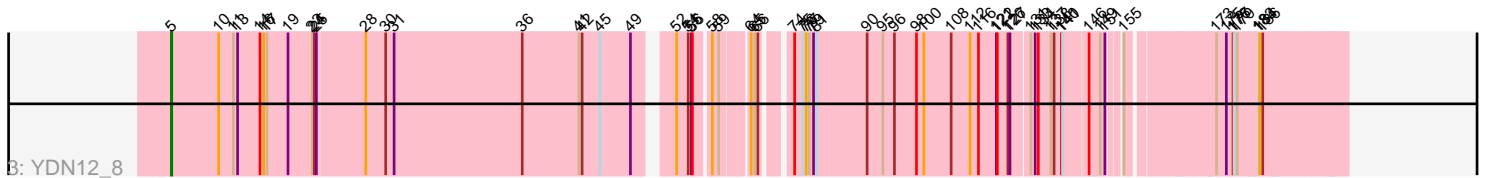
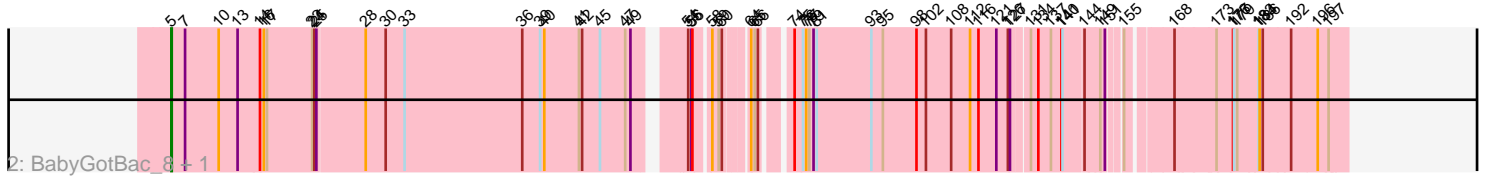
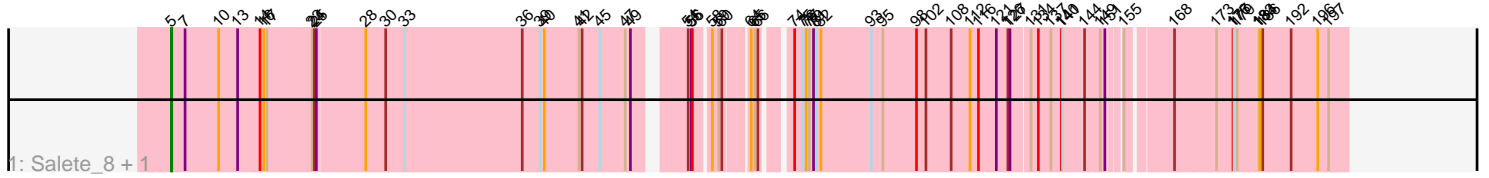


# Pham 221957



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 221957 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221957 has 12 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Salete\_8, BayC\_8
- Track 2 : BabyGotBac\_8, TP1604\_8
- Track 3 : YDN12\_8
- Track 4 : Xkcd426\_8
- Track 5 : Mischief19\_8
- Track 6 : Asis\_8, Maih\_8
- Track 7 : RainyPolka\_8
- Track 8 : Abt2graduatex2\_8
- Track 9 : TurkishDelight\_28

### ***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 10 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abt2graduatex2\_8, Asis\_8, BabyGotBac\_8, BayC\_8, Maih\_8, Mischief19\_8, RainyPolka\_8, Salete\_8, TP1604\_8, Xkcd426\_8, YDN12\_8,

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

- 

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

- TurkishDelight\_28,

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

Start 1:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TurkishDelight\_28 (singleton),

Start 5:

- Found in 11 of 12 ( 91.7% ) of genes in pham
- Manual Annotations of this start: 10 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2\_8 (BG), Asis\_8 (BG), BabyGotBac\_8 (BG), BayC\_8 (BG), Maih\_8 (BG), Mischief19\_8 (BG), RainyPolka\_8 (BG), Salete\_8 (BG), TP1604\_8 (BG), Xkcd426\_8 (BG), YDN12\_8 (BG),

### Summary by clusters:

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

Info for manual annotations of cluster BG:

- Start number 5 was manually annotated 10 times for cluster BG.

### Gene Information:

Gene: Abt2graduatex2\_8 Start: 4210, Stop: 7257, Start Num: 5

Candidate Starts for Abt2graduatex2\_8:

(Start: 5 @4210 has 10 MA's), (9, 4312), (10, 4345), (13, 4399), (14, 4462), (16, 4471), (17, 4480), (19, 4540), (24, 4615), (25, 4621), (28, 4753), (30, 4810), (35, 5005), (36, 5200), (39, 5251), (41, 5362), (42, 5371), (45, 5422), (52, 5587), (54, 5611), (55, 5620), (57, 5632), (58, 5656), (59, 5674), (60, 5683), (64, 5731), (69, 5761), (74, 5809), (76, 5839), (77, 5848), (81, 5869), (90, 6013), (92, 6022), (93, 6025), (95, 6058), (96, 6091), (98, 6154), (100, 6175), (103, 6187), (105, 6205), (108, 6253), (113, 6316), (115, 6328), (116, 6331), (121, 6382), (136, 6514), (137, 6517), (140, 6547), (141, 6550), (146, 6616), (151, 6658), (153, 6679), (155, 6682), (168, 6790), (176, 6949), (177, 6952), (179, 6961), (181, 7000), (183, 7018), (192, 7105), (196, 7177), (197, 7207),

Gene: Asis\_8 Start: 4267, Stop: 7314, Start Num: 5

Candidate Starts for Asis\_8:

(Start: 5 @4267 has 10 MA's), (7, 4306), (10, 4402), (13, 4456), (14, 4519), (16, 4528), (17, 4537), (23, 4666), (24, 4672), (25, 4678), (28, 4810), (30, 4867), (33, 4921), (36, 5257), (39, 5308), (40, 5320), (41, 5419), (42, 5428), (45, 5479), (47, 5551), (49, 5566), (54, 5668), (55, 5677), (56, 5680), (58, 5713), (59, 5731), (60, 5740), (64, 5788), (65, 5797), (66, 5806), (74, 5866), (75, 5887), (76, 5896), (77, 5905), (79, 5917), (81, 5926), (82, 5938), (93, 6082), (95, 6115), (98, 6211), (108, 6310), (112, 6364), (116, 6388), (121, 6439), (126, 6472), (127, 6475), (131, 6517), (134, 6538), (137, 6574), (140, 6604), (141, 6607), (144, 6661), (149, 6703), (151, 6715), (155, 6739), (168, 6847), (173, 6961), (176, 7006), (177, 7009), (179, 7018), (183, 7075), (184, 7078), (186, 7087), (192, 7162), (196, 7234), (197, 7264),

Gene: BabyGotBac\_8 Start: 4267, Stop: 7314, Start Num: 5

Candidate Starts for BabyGotBac\_8:

(Start: 5 @4267 has 10 MA's), (7, 4306), (10, 4402), (13, 4456), (14, 4519), (16, 4528), (17, 4537), (23, 4666), (24, 4672), (25, 4678), (28, 4810), (30, 4867), (33, 4921), (36, 5257), (39, 5308), (40, 5320), (41, 5419), (42, 5428), (45, 5479), (47, 5551), (49, 5566), (54, 5668), (55, 5677), (56, 5680), (58, 5713), (59, 5731), (60, 5740), (64, 5788), (65, 5797), (66, 5806), (74, 5866), (75, 5887), (76, 5896), (77, 5905), (79, 5917), (81, 5926), (93, 6082), (95, 6115), (98, 6211), (102, 6238), (108, 6310), (112, 6364), (116, 6388), (121, 6439), (126, 6472), (127, 6475), (131, 6517), (134, 6538), (137, 6574), (140, 6604), (141, 6607), (144, 6661), (149, 6703), (151, 6715), (155, 6739), (168, 6847), (173, 6961), (176, 7006), (177, 7009), (179, 7018), (183, 7075), (184, 7078), (186, 7087), (192, 7162), (196, 7234), (197, 7264),

Gene: BayC\_8 Start: 4267, Stop: 7314, Start Num: 5

Candidate Starts for BayC\_8:

(Start: 5 @4267 has 10 MA's), (7, 4306), (10, 4402), (13, 4456), (14, 4519), (16, 4528), (17, 4537), (23, 4666), (24, 4672), (25, 4678), (28, 4810), (30, 4867), (33, 4921), (36, 5257), (39, 5308), (40, 5320), (41, 5419), (42, 5428), (45, 5479), (47, 5551), (49, 5566), (54, 5668), (55, 5677), (56, 5680), (58, 5713), (59, 5731), (60, 5740), (64, 5788), (65, 5797), (66, 5806), (74, 5866), (75, 5887), (76, 5896), (77, 5905), (79, 5917), (81, 5926), (82, 5938), (93, 6082), (95, 6115), (98, 6211), (102, 6238), (108, 6310), (112, 6364), (116, 6388), (121, 6439), (126, 6472), (127, 6475), (131, 6517), (134, 6538), (137, 6574), (140, 6604), (141, 6607), (144, 6661), (149, 6703), (151, 6715), (155, 6739), (168, 6847), (173, 6961), (176, 7006), (177, 7009), (179, 7018), (183, 7075), (184, 7078), (186, 7087), (192, 7162), (196, 7234), (197, 7264),

Gene: Maih\_8 Start: 4266, Stop: 7313, Start Num: 5

Candidate Starts for Maih\_8:

(Start: 5 @4266 has 10 MA's), (7, 4305), (10, 4401), (13, 4455), (14, 4518), (16, 4527), (17, 4536), (23, 4665), (24, 4671), (25, 4677), (28, 4809), (30, 4866), (33, 4920), (36, 5256), (39, 5307), (40, 5319), (41, 5418), (42, 5427), (45, 5478), (47, 5550), (49, 5565), (54, 5667), (55, 5676), (56, 5679), (58, 5712), (59, 5730), (60, 5739), (64, 5787), (65, 5796), (66, 5805), (74, 5865), (75, 5886), (76, 5895), (77, 5904), (79, 5916), (81, 5925), (82, 5937), (93, 6081), (95, 6114), (98, 6210), (108, 6309), (112, 6363), (116, 6387), (121, 6438), (126, 6471), (127, 6474), (131, 6516), (134, 6537), (137, 6573), (140, 6603), (141, 6606), (144, 6660), (149, 6702), (151, 6714), (155, 6738), (168, 6846), (173, 6960), (176, 7005), (177, 7008), (179, 7017), (183, 7074), (184, 7077), (186, 7086), (192, 7161), (196, 7233), (197, 7263),

Gene: Mischief19\_8 Start: 4246, Stop: 8070, Start Num: 5

Candidate Starts for Mischief19\_8:

(Start: 5 @4246 has 10 MA's), (8, 4345), (12, 4429), (15, 4507), (18, 4573), (19, 4579), (20, 4585), (22, 4642), (27, 4765), (29, 4828), (30, 4858), (34, 5011), (35, 5053), (38, 5278), (39, 5299), (40, 5311), (43, 5437), (46, 5491), (47, 5542), (53, 5701), (56, 5734), (61, 5875), (63, 5899), (67, 5926), (70, 5968), (73, 6022), (78, 6067), (82, 6097), (83, 6139), (85, 6151), (87, 6172), (88, 6199), (94, 6259), (104, 6409), (107, 6454), (109, 6472), (113, 6532), (118, 6565), (124, 6610), (126, 6631), (131, 6676), (142, 6796), (143, 6817), (145, 6832), (152, 6898), (154, 6928), (156, 6949), (158, 6964), (161, 6982), (163, 7042), (164, 7048), (182, 7309), (185, 7324), (189, 7354), (191, 7387), (203, 7606), (204, 7687), (205, 7708), (206, 7783), (207, 7900),

Gene: RainyPolka\_8 Start: 4224, Stop: 7268, Start Num: 5

Candidate Starts for RainyPolka\_8:

(2, 4122), (3, 4125), (4, 4140), (Start: 5 @4224 has 10 MA's), (6, 4239), (10, 4359), (13, 4413), (14, 4476), (16, 4485), (17, 4494), (19, 4554), (24, 4629), (25, 4635), (30, 4824), (33, 4878), (36, 5214), (39, 5265), (41, 5376), (42, 5385), (45, 5436), (48, 5511), (54, 5625), (55, 5634), (57, 5646), (59, 5688), (60, 5697), (65, 5754), (69, 5775), (71, 5802), (74, 5823), (76, 5853), (77, 5862), (79, 5874), (81, 5883), (82, 5895), (89, 6024), (90, 6027), (93, 6039), (95, 6072), (96, 6105), (98, 6168), (100, 6189), (101, 6192), (103, 6201), (105, 6219), (108, 6267), (113, 6330), (115, 6342), (116, 6345), (121, 6396), (128, 6450), (131, 6474), (136, 6528), (137, 6531), (140, 6561), (141, 6564), (142, 6594), (146, 6630), (150, 6669), (151, 6672), (153, 6693), (155, 6696), (176, 6963), (177, 6966), (179, 6975), (181, 7014), (186, 7044), (196, 7188), (197, 7218),

Gene: Salete\_8 Start: 4267, Stop: 7314, Start Num: 5

Candidate Starts for Salete\_8:

(Start: 5 @4267 has 10 MA's), (7, 4306), (10, 4402), (13, 4456), (14, 4519), (16, 4528), (17, 4537), (23, 4666), (24, 4672), (25, 4678), (28, 4810), (30, 4867), (33, 4921), (36, 5257), (39, 5308), (40, 5320), (41, 5419), (42, 5428), (45, 5479), (47, 5551), (49, 5566), (54, 5668), (55, 5677), (56, 5680), (58, 5713), (59, 5731), (60, 5740), (64, 5788), (65, 5797), (66, 5806), (74, 5866), (75, 5887), (76, 5896), (77, 5905), (79, 5917), (81, 5926), (82, 5938), (93, 6082), (95, 6115), (98, 6211), (102, 6238), (108, 6310), (112, 6364), (116, 6388), (121, 6439), (126, 6472), (127, 6475), (131, 6517), (134, 6538), (137, 6574), (140, 6604), (141, 6607), (144, 6661), (149, 6703), (151, 6715), (155, 6739), (168, 6847), (173, 6961), (176, 7006), (177, 7009), (179, 7018), (183, 7075), (184, 7078), (186, 7087), (192, 7162), (196, 7234), (197, 7264),

Gene: TP1604\_8 Start: 4267, Stop: 7314, Start Num: 5

Candidate Starts for TP1604\_8:

(Start: 5 @4267 has 10 MA's), (7, 4306), (10, 4402), (13, 4456), (14, 4519), (16, 4528), (17, 4537), (23, 4666), (24, 4672), (25, 4678), (28, 4810), (30, 4867), (33, 4921), (36, 5257), (39, 5308), (40, 5320), (41, 5419), (42, 5428), (45, 5479), (47, 5551), (49, 5566), (54, 5668), (55, 5677), (56, 5680), (58, 5713), (59, 5731), (60, 5740), (64, 5788), (65, 5797), (66, 5806), (74, 5866), (75, 5887), (76, 5896), (77, 5905), (79, 5917), (81, 5926), (93, 6082), (95, 6115), (98, 6211), (102, 6238), (108, 6310), (112, 6364), (116, 6388), (121, 6439), (126, 6472), (127, 6475), (131, 6517), (134, 6538), (137, 6574), (140, 6604), (141, 6607), (144, 6661), (149, 6703), (151, 6715), (155, 6739), (168, 6847), (173, 6961), (176, 7006), (177, 7009), (179, 7018), (183, 7075), (184, 7078), (186, 7087), (192, 7162), (196, 7234), (197, 7264),

Gene: TurkishDelight\_28 Start: 22980, Stop: 26681, Start Num: 1

Candidate Starts for TurkishDelight\_28:

(Start: 1 @22980 has 1 MA's), (26, 23862), (27, 23943), (32, 24084), (33, 24090), (36, 24426), (37, 24444), (39, 24477), (42, 24597), (51, 24795), (72, 25080), (80, 25158), (84, 25221), (91, 25311), (99, 25458), (102, 25476), (109, 25551), (110, 25569), (113, 25611), (117, 25641), (123, 25686), (125, 25707), (129, 25743), (130, 25773), (132, 25779), (147, 25944), (155, 26010), (160, 26052), (162, 26082), (166, 26139), (167, 26142), (169, 26160), (170, 26175), (172, 26250), (174, 26274), (178, 26325), (187, 26421), (193, 26514), (194, 26520), (199, 26628), (200, 26643), (201, 26646), (202, 26673),

Gene: Xkcd426\_8 Start: 4325, Stop: 7600, Start Num: 5

Candidate Starts for Xkcd426\_8:

(Start: 5 @4325 has 10 MA's), (10, 4460), (18, 4652), (20, 4664), (21, 4712), (24, 4733), (27, 4835), (30, 4928), (43, 5507), (44, 5528), (50, 5639), (58, 5861), (62, 5960), (68, 6014), (86, 6233), (87, 6242), (95, 6344), (97, 6428), (100, 6461), (102, 6467), (106, 6515), (108, 6539), (109, 6542), (111, 6581), (114, 6605), (115, 6614), (119, 6656), (120, 6659), (121, 6668), (124, 6680), (131, 6746), (135, 6788), (139, 6824), (148, 6920), (157, 7022), (159, 7034), (160, 7043), (165, 7118), (166, 7130), (169, 7151), (171, 7187), (180, 7334), (187, 7397), (188, 7400), (190, 7418), (195, 7511), (198, 7592),

Gene: YDN12\_8 Start: 4250, Stop: 7294, Start Num: 5

Candidate Starts for YDN12\_8:

(Start: 5 @4250 has 10 MA's), (10, 4385), (11, 4427), (13, 4439), (14, 4502), (16, 4511), (17, 4520), (19, 4580), (23, 4649), (24, 4655), (25, 4661), (28, 4793), (30, 4850), (31, 4874), (36, 5240), (41, 5402), (42, 5411), (45, 5462), (49, 5549), (52, 5627), (54, 5651), (55, 5660), (56, 5663), (58, 5696), (59, 5714), (64, 5771), (65, 5780), (66, 5789), (74, 5849), (75, 5870), (76, 5879), (77, 5888), (79, 5900), (81, 5909), (90, 6053), (95, 6098), (96, 6131), (98, 6194), (100, 6215), (108, 6293), (112, 6347), (116, 6371), (121, 6422), (122, 6425), (126, 6455), (127, 6458), (131, 6500), (133, 6512), (134, 6521), (137, 6557), (138, 6566), (140, 6587), (141, 6590), (146, 6656), (149, 6686), (151, 6698), (155, 6722), (173, 6944), (175, 6971), (176, 6989), (177, 6992), (179, 7001), (183, 7058), (184, 7061), (186, 7070),