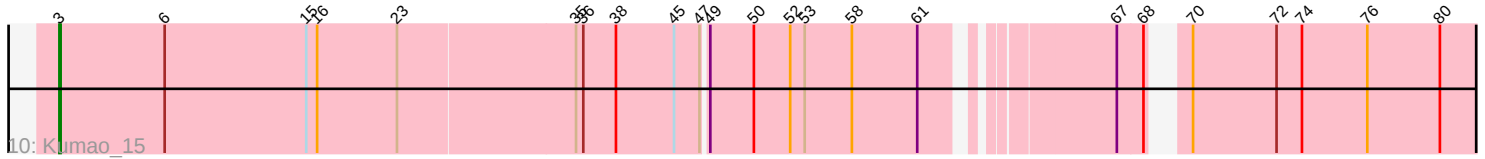
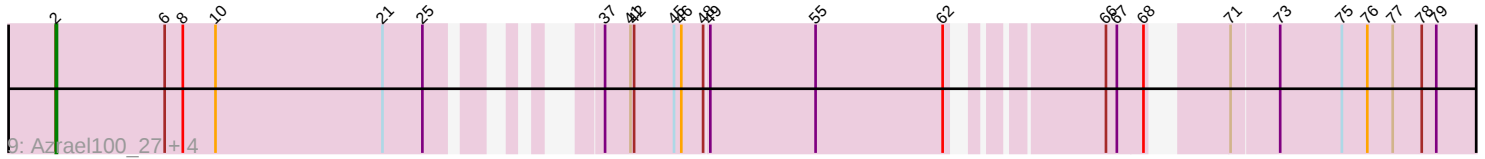
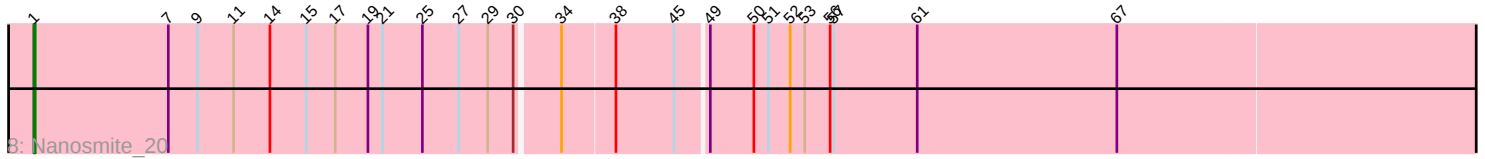
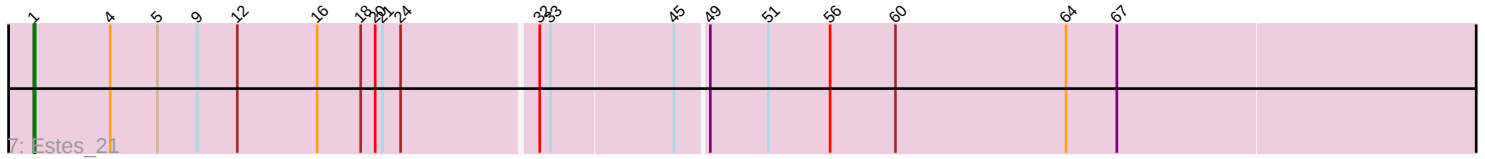
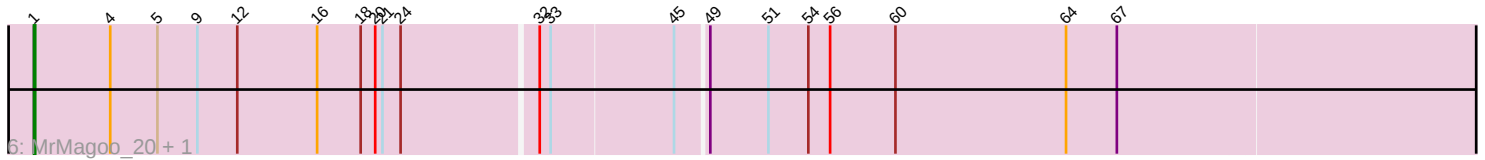
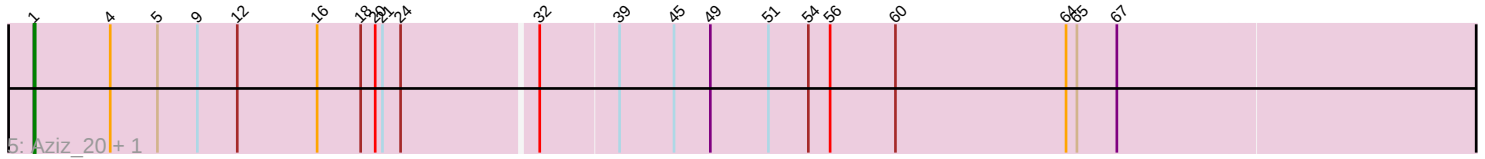
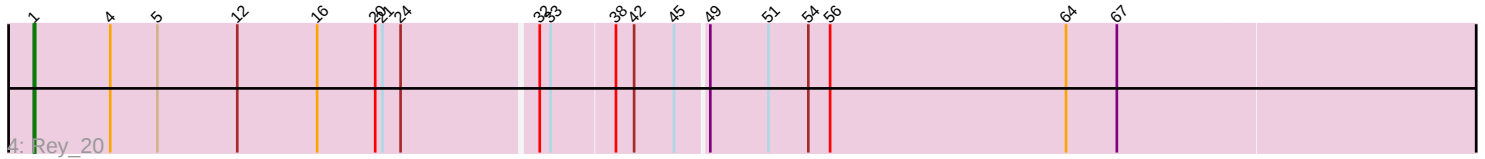
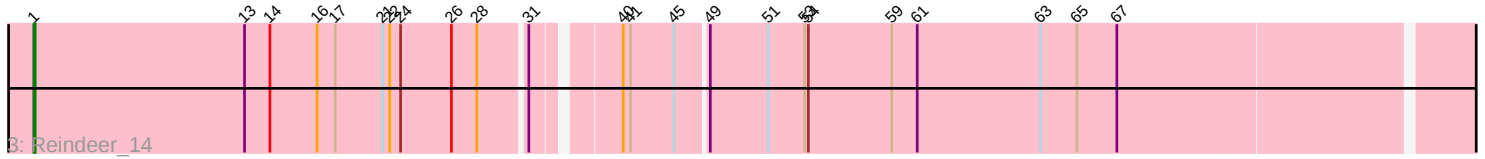
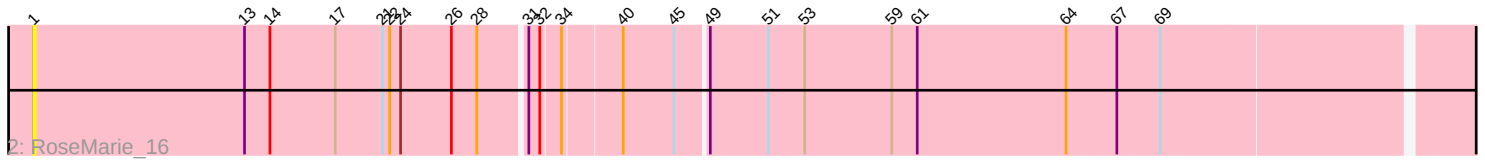
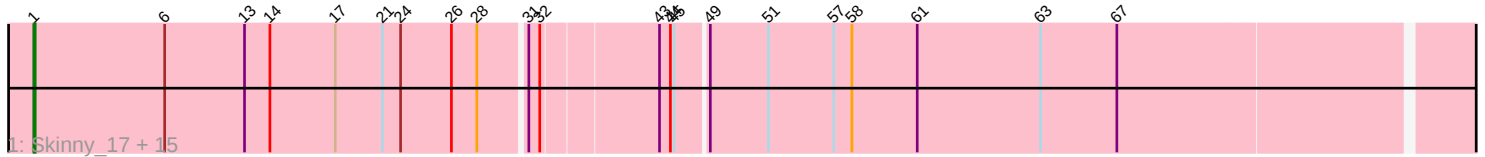


# Pham 329286



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 329286 Report

This analysis was run 09/05/26 on database version 662.

Pham number 329286 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Skinny\_17, Bricole\_16, Dulcita\_17, IPhane7\_16, Bongo\_16, SlimJimmy\_15, FreakyGoo\_17, LilhomieP\_15, Glaske16\_17, KleverKiS\_16, Diminimus\_17, TpudiCK\_17, PegLeg\_16, Izel\_17, TyDawg\_16, Auspice\_16
- Track 2 : RoseMarie\_16
- Track 3 : Reindeer\_14
- Track 4 : Rey\_20
- Track 5 : Aziz\_20, GenevaB15\_20
- Track 6 : MrMagoo\_20, GardenSalsa\_20
- Track 7 : Estes\_21
- Track 8 : Nanosmite\_20
- Track 9 : Azrael100\_27, MaryV\_28, Cosmo\_28, EniyanLRS\_25, Wildcat\_28
- Track 10 : Kumao\_15

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

The start number called the most often in the published annotations is 1, it was called in 22 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_16, Aziz\_20, Bongo\_16, Bricole\_16, Diminimus\_17, Dulcita\_17, Estes\_21, FreakyGoo\_17, GardenSalsa\_20, GenevaB15\_20, Glaske16\_17, IPhane7\_16, Izel\_17, KleverKiS\_16, LilhomieP\_15, MrMagoo\_20, Nanosmite\_20, PegLeg\_16, Reindeer\_14, Rey\_20, RoseMarie\_16, Skinny\_17, SlimJimmy\_15, TpudiCK\_17, TyDawg\_16,

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

- 

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

- Azrael100\_27, Cosmo\_28, EniyanLRS\_25, Kumao\_15, MaryV\_28, Wildcat\_28,

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

Start 1:

- Found in 25 of 31 ( 80.6% ) of genes in pham
- Manual Annotations of this start: 22 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_16 (M1), Aziz\_20 (M2), Bongo\_16 (M1), Bricole\_16 (M1), Diminimus\_17 (M1), Dulcita\_17 (M1), Estes\_21 (M2), FreakyGoo\_17 (M1), GardenSalsa\_20 (M2), GenevaB15\_20 (M2), Glaske16\_17 (M1), IPhane7\_16 (M1), Izel\_17 (M1), KleverKiS\_16 (M1), LilhomieP\_15 (M1), MrMagoo\_20 (M2), Nanosmite\_20 (M3), PegLeg\_16 (M1), Reindeer\_14 (M1), Rey\_20 (M2), RoseMarie\_16 (M1), Skinny\_17 (M1), SlimJimmy\_15 (M1), TpudiCK\_17 (M1), TyDawg\_16 (M1),

#### Start 2:

- Found in 5 of 31 ( 16.1% ) of genes in pham
- Manual Annotations of this start: 5 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_27 (V), Cosmo\_28 (V), EniyanLRS\_25 (V), MaryV\_28 (V), Wildcat\_28 (V),

#### Start 3:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_15 (singleton),

### Summary by clusters:

There are 5 clusters represented in this pham: singleton, V, M1, M3, M2,

Info for manual annotations of cluster M1:

- Start number 1 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 1 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 1 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 2 was manually annotated 5 times for cluster V.

### Gene Information:

Gene: Auspice\_16 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for Auspice\_16:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: Aziz\_20 Start: 8460, Stop: 9641, Start Num: 1

Candidate Starts for Aziz\_20:

(Start: 1 @8460 has 22 MA's), (4, 8523), (5, 8562), (9, 8595), (12, 8628), (16, 8694), (18, 8730), (20, 8742), (21, 8748), (24, 8763), (32, 8871), (39, 8934), (45, 8979), (49, 9009), (51, 9057), (54, 9090), (56, 9108), (60, 9162), (64, 9303), (65, 9312), (67, 9345),

Gene: Azrael100\_27 Start: 11178, Stop: 12212, Start Num: 2

Candidate Starts for Azrael100\_27:

(Start: 2 @11178 has 5 MA's), (6, 11268), (8, 11283), (10, 11310), (21, 11448), (25, 11481), (37, 11559), (41, 11580), (42, 11583), (45, 11616), (46, 11622), (48, 11640), (49, 11643), (55, 11730), (62, 11835), (66, 11934), (67, 11943), (68, 11964), (71, 12009), (73, 12045), (75, 12096), (76, 12117), (77, 12138), (78, 12162), (79, 12174),

Gene: Bongo\_16 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for Bongo\_16:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: Bricole\_16 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Bricole\_16:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: Cosmo\_28 Start: 11185, Stop: 12219, Start Num: 2

Candidate Starts for Cosmo\_28:

(Start: 2 @11185 has 5 MA's), (6, 11275), (8, 11290), (10, 11317), (21, 11455), (25, 11488), (37, 11566), (41, 11587), (42, 11590), (45, 11623), (46, 11629), (48, 11647), (49, 11650), (55, 11737), (62, 11842), (66, 11941), (67, 11950), (68, 11971), (71, 12016), (73, 12052), (75, 12103), (76, 12124), (77, 12145), (78, 12169), (79, 12181),

Gene: Diminimus\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Diminimus\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: Dulcita\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Dulcita\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: EniyanLRS\_25 Start: 10876, Stop: 11910, Start Num: 2

Candidate Starts for EniyanLRS\_25:

(Start: 2 @10876 has 5 MA's), (6, 10966), (8, 10981), (10, 11008), (21, 11146), (25, 11179), (37, 11257), (41, 11278), (42, 11281), (45, 11314), (46, 11320), (48, 11338), (49, 11341), (55, 11428), (62, 11533), (66, 11632), (67, 11641), (68, 11662), (71, 11707), (73, 11743), (75, 11794), (76, 11815), (77, 11836), (78, 11860), (79, 11872),

Gene: Estes\_21 Start: 8605, Stop: 9780, Start Num: 1

Candidate Starts for Estes\_21:

(Start: 1 @8605 has 22 MA's), (4, 8668), (5, 8707), (9, 8740), (12, 8773), (16, 8839), (18, 8875), (20, 8887), (21, 8893), (24, 8908), (32, 9016), (33, 9025), (45, 9124), (49, 9148), (51, 9196), (56, 9247), (60,

9301), (64, 9442), (67, 9484),

Gene: FreakyGoo\_17 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for FreakyGoo\_17:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: GardenSalsa\_20 Start: 8439, Stop: 9614, Start Num: 1

Candidate Starts for GardenSalsa\_20:

(Start: 1 @8439 has 22 MA's), (4, 8502), (5, 8541), (9, 8574), (12, 8607), (16, 8673), (18, 8709), (20, 8721), (21, 8727), (24, 8742), (32, 8850), (33, 8859), (45, 8958), (49, 8982), (51, 9030), (54, 9063), (56, 9081), (60, 9135), (64, 9276), (67, 9318),

Gene: GenevaB15\_20 Start: 8460, Stop: 9641, Start Num: 1

Candidate Starts for GenevaB15\_20:

(Start: 1 @8460 has 22 MA's), (4, 8523), (5, 8562), (9, 8595), (12, 8628), (16, 8694), (18, 8730), (20, 8742), (21, 8748), (24, 8763), (32, 8871), (39, 8934), (45, 8979), (49, 9009), (51, 9057), (54, 9090), (56, 9108), (60, 9162), (64, 9303), (65, 9312), (67, 9345),

Gene: Glaske16\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Glaske16\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: IPHane7\_16 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for IPHane7\_16:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: Izel\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Izel\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: KleverKiS\_16 Start: 7878, Stop: 9038, Start Num: 1

Candidate Starts for KleverKiS\_16:

(Start: 1 @7878 has 22 MA's), (6, 7986), (13, 8052), (14, 8073), (17, 8127), (21, 8166), (24, 8181), (26, 8223), (28, 8244), (31, 8280), (32, 8289), (43, 8379), (44, 8388), (45, 8391), (49, 8415), (51, 8463), (57, 8517), (58, 8532), (61, 8586), (63, 8688), (67, 8751),

Gene: Kumao\_15 Start: 7305, Stop: 8408, Start Num: 3

Candidate Starts for Kumao\_15:

(Start: 3 @7305 has 1 MA's), (6, 7392), (15, 7509), (16, 7518), (23, 7584), (35, 7728), (36, 7734), (38, 7761), (45, 7809), (47, 7830), (49, 7833), (50, 7869), (52, 7899), (53, 7911), (58, 7950), (61, 8004), (67, 8133), (68, 8154), (70, 8169), (72, 8238), (74, 8259), (76, 8313), (80, 8373),

Gene: LilhomieP\_15 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for LilhomieP\_15:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: MaryV\_28 Start: 11148, Stop: 12182, Start Num: 2

Candidate Starts for MaryV\_28:

(Start: 2 @11148 has 5 MA's), (6, 11238), (8, 11253), (10, 11280), (21, 11418), (25, 11451), (37, 11529), (41, 11550), (42, 11553), (45, 11586), (46, 11592), (48, 11610), (49, 11613), (55, 11700), (62, 11805), (66, 11904), (67, 11913), (68, 11934), (71, 11979), (73, 12015), (75, 12066), (76, 12087), (77, 12108), (78, 12132), (79, 12144),

Gene: MrMagoo\_20 Start: 8439, Stop: 9614, Start Num: 1

Candidate Starts for MrMagoo\_20:

(Start: 1 @8439 has 22 MA's), (4, 8502), (5, 8541), (9, 8574), (12, 8607), (16, 8673), (18, 8709), (20, 8721), (21, 8727), (24, 8742), (32, 8850), (33, 8859), (45, 8958), (49, 8982), (51, 9030), (54, 9063), (56, 9081), (60, 9135), (64, 9276), (67, 9318),

Gene: Nanosmite\_20 Start: 8660, Stop: 9835, Start Num: 1

Candidate Starts for Nanosmite\_20:

(Start: 1 @8660 has 22 MA's), (7, 8771), (9, 8795), (11, 8825), (14, 8855), (15, 8885), (17, 8909), (19, 8936), (21, 8948), (25, 8981), (27, 9011), (29, 9035), (30, 9056), (34, 9089), (38, 9131), (45, 9179), (49, 9203), (50, 9239), (51, 9251), (52, 9269), (53, 9281), (56, 9302), (57, 9305), (61, 9374), (67, 9539),

Gene: PegLeg\_16 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for PegLeg\_16:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: Reindeer\_14 Start: 7753, Stop: 8904, Start Num: 1

Candidate Starts for Reindeer\_14:

(Start: 1 @7753 has 22 MA's), (13, 7927), (14, 7948), (16, 7987), (17, 8002), (21, 8041), (22, 8047), (24, 8056), (26, 8098), (28, 8119), (31, 8155), (40, 8215), (41, 8221), (45, 8257), (49, 8281), (51, 8329), (53, 8359), (54, 8362), (59, 8431), (61, 8452), (63, 8554), (65, 8584), (67, 8617),

Gene: Rey\_20 Start: 8671, Stop: 9846, Start Num: 1

Candidate Starts for Rey\_20:

(Start: 1 @8671 has 22 MA's), (4, 8734), (5, 8773), (12, 8839), (16, 8905), (20, 8953), (21, 8959), (24, 8974), (32, 9082), (33, 9091), (38, 9142), (42, 9157), (45, 9190), (49, 9214), (51, 9262), (54, 9295), (56, 9313), (64, 9508), (67, 9550),

Gene: RoseMarie\_16 Start: 8126, Stop: 9286, Start Num: 1

Candidate Starts for RoseMarie\_16:

(Start: 1 @8126 has 22 MA's), (13, 8300), (14, 8321), (17, 8375), (21, 8414), (22, 8420), (24, 8429), (26, 8471), (28, 8492), (31, 8528), (32, 8537), (34, 8552), (40, 8597), (45, 8639), (49, 8663), (51, 8711), (53, 8741), (59, 8813), (61, 8834), (64, 8957), (67, 8999), (69, 9035),

Gene: Skinny\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for Skinny\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: SlimJimmy\_15 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for SlimJimmy\_15:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: TpudiCK\_17 Start: 7881, Stop: 9041, Start Num: 1

Candidate Starts for TpudiCK\_17:

(Start: 1 @7881 has 22 MA's), (6, 7989), (13, 8055), (14, 8076), (17, 8130), (21, 8169), (24, 8184), (26, 8226), (28, 8247), (31, 8283), (32, 8292), (43, 8382), (44, 8391), (45, 8394), (49, 8418), (51, 8466), (57, 8520), (58, 8535), (61, 8589), (63, 8691), (67, 8754),

Gene: TyDawg\_16 Start: 7882, Stop: 9042, Start Num: 1

Candidate Starts for TyDawg\_16:

(Start: 1 @7882 has 22 MA's), (6, 7990), (13, 8056), (14, 8077), (17, 8131), (21, 8170), (24, 8185), (26, 8227), (28, 8248), (31, 8284), (32, 8293), (43, 8383), (44, 8392), (45, 8395), (49, 8419), (51, 8467), (57, 8521), (58, 8536), (61, 8590), (63, 8692), (67, 8755),

Gene: Wildcat\_28 Start: 11158, Stop: 12192, Start Num: 2

Candidate Starts for Wildcat\_28:

(Start: 2 @11158 has 5 MA's), (6, 11248), (8, 11263), (10, 11290), (21, 11428), (25, 11461), (37, 11539), (41, 11560), (42, 11563), (45, 11596), (46, 11602), (48, 11620), (49, 11623), (55, 11710), (62, 11815), (66, 11914), (67, 11923), (68, 11944), (71, 11989), (73, 12025), (75, 12076), (76, 12097), (77, 12118), (78, 12142), (79, 12154),