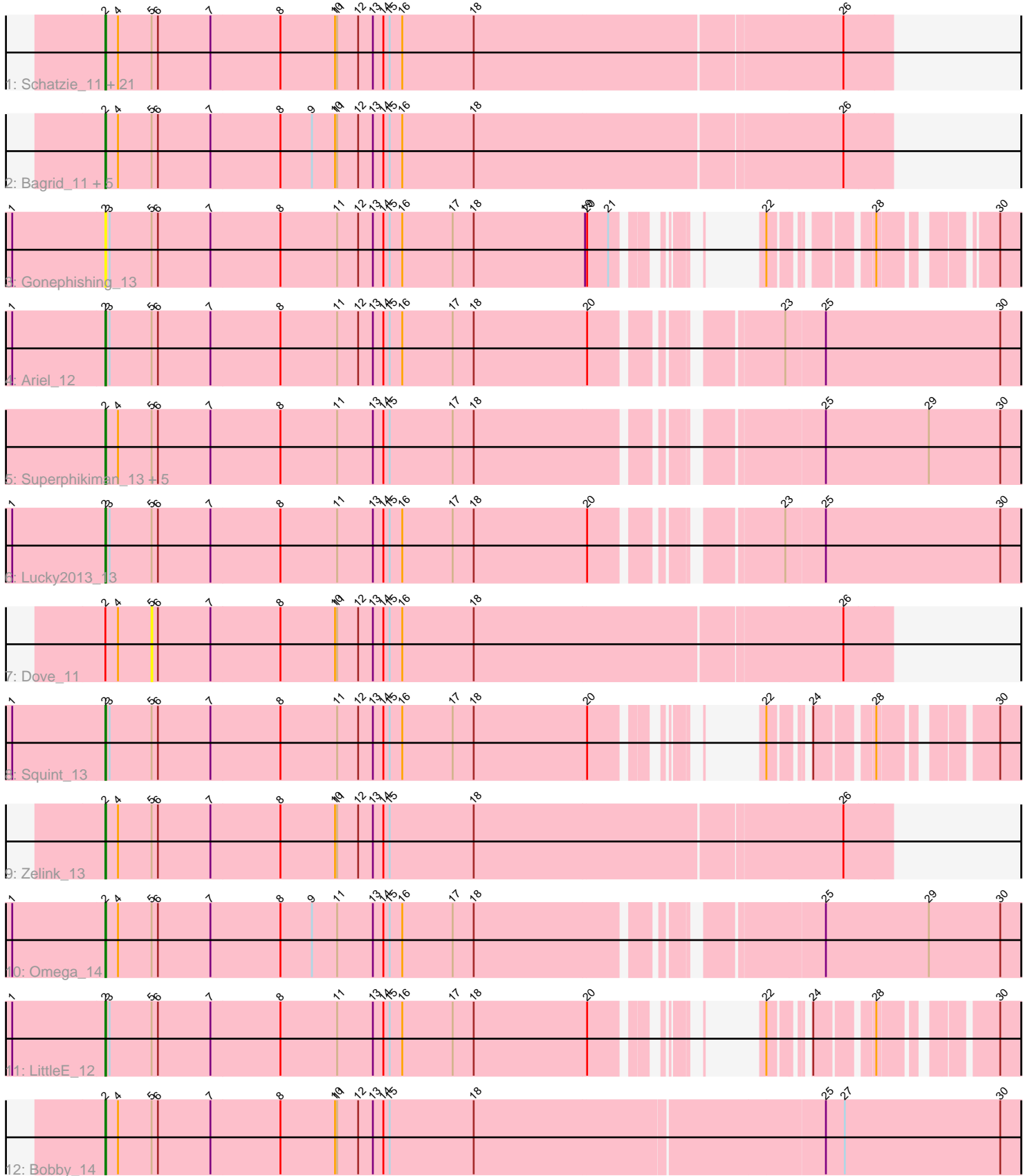


# Pham 85956



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 85956 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85956 has 43 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Schatzie\_11, NihilNomen\_12, Ejimix\_14, Pound\_12, ThreeRngTarjay\_12, Yeet\_11, EricMillard\_13, Klein\_13, Phoebus\_13, Bombitas\_10, DmpstrDiver\_12, Wanda\_13, Optimus\_10, Hughesyang\_12, Dallas\_12, BAKA\_9, Minerva\_12, Duke13\_9, Odette\_12, HokkenD\_8, JuicyJay\_14, Halley\_13
- Track 2 : Bagrid\_11, Kalah2\_13, Beem\_13, Constella\_8, Thibault\_9, Redno2\_12
- Track 3 : Gonephishing\_13
- Track 4 : Ariel\_12
- Track 5 : Superphikiman\_13, MiaZeal\_13, Porcelain\_13, KashFlow\_7, Courthouse\_13, Hannaconda\_10
- Track 6 : Lucky2013\_13
- Track 7 : Dove\_11
- Track 8 : Squint\_13
- Track 9 : Zelink\_13
- Track 10 : Omega\_14
- Track 11 : LittleE\_12
- Track 12 : Bobby\_14

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

The start number called the most often in the published annotations is 2, it was called in 39 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_12, BAKA\_9, Bagrid\_11, Beem\_13, Bobby\_14, Bombitas\_10, Constella\_8, Courthouse\_13, Dallas\_12, DmpstrDiver\_12, Duke13\_9, Ejimix\_14, EricMillard\_13, Gonephishing\_13, Halley\_13, Hannaconda\_10, HokkenD\_8, Hughesyang\_12, JuicyJay\_14, Kalah2\_13, KashFlow\_7, Klein\_13, LittleE\_12, Lucky2013\_13, MiaZeal\_13, Minerva\_12, NihilNomen\_12, Odette\_12, Omega\_14, Optimus\_10, Phoebus\_13, Porcelain\_13, Pound\_12, Redno2\_12, Schatzie\_11, Squint\_13, Superphikiman\_13, Thibault\_9, ThreeRngTarjay\_12, Wanda\_13, Yeet\_11, Zelink\_13,

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

- Dove\_11,

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

- 

### Summary by start number:

Start 2:

- Found in 43 of 43 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 39 of 39
- Called 97.7% of time when present
- Phage (with cluster) where this start called: Ariel\_12 (J), BAKA\_9 (J), Bagrid\_11 (J), Beem\_13 (J), Bobby\_14 (J), Bombitas\_10 (J), Constella\_8 (J), Courthouse\_13 (J), Dallas\_12 (J), DmpstrDiver\_12 (J), Duke13\_9 (J), Ejimix\_14 (J), EricMillard\_13 (J), Gonephishing\_13 (J), Halley\_13 (J), Hannaconda\_10 (J), HokkenD\_8 (J), Hughesyang\_12 (J), JuicyJay\_14 (J), Kalah2\_13 (J), KashFlow\_7 (J), Klein\_13 (J), LittleE\_12 (J), Lucky2013\_13 (J), MiaZeal\_13 (J), Minerva\_12 (J), NihilNomen\_12 (J), Odette\_12 (J), Omega\_14 (J), Optimus\_10 (J), Phoebus\_13 (J), Porcelain\_13 (J), Pound\_12 (J), Redno2\_12 (J), Schatzie\_11 (J), Squint\_13 (J), Superphikiman\_13 (J), Thibault\_9 (J), ThreeRngTarjay\_12 (J), Wanda\_13 (J), Yeet\_11 (J), Zelink\_13 (J),

Start 5:

- Found in 43 of 43 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Dove\_11 (J),

### Summary by clusters:

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:

- Start number 2 was manually annotated 39 times for cluster J.

### Gene Information:

Gene: Ariel\_12 Start: 5861, Stop: 7132, Start Num: 2

Candidate Starts for Ariel\_12:

(1, 5729), (Start: 2 @5861 has 39 MA's), (3, 5867), (5, 5927), (6, 5936), (7, 6011), (8, 6110), (11, 6191), (12, 6221), (13, 6242), (14, 6257), (15, 6266), (16, 6284), (17, 6356), (18, 6386), (20, 6545), (23, 6761), (25, 6815), (30, 7064),

Gene: BAKA\_9 Start: 6688, Stop: 7791, Start Num: 2

Candidate Starts for BAKA\_9:

(Start: 2 @6688 has 39 MA's), (4, 6706), (5, 6754), (6, 6763), (7, 6838), (8, 6937), (10, 7015), (11, 7018), (12, 7048), (13, 7069), (14, 7084), (15, 7093), (16, 7111), (18, 7213), (26, 7723),

Gene: Bagrid\_11 Start: 6485, Stop: 7588, Start Num: 2

Candidate Starts for Bagrid\_11:

(Start: 2 @6485 has 39 MA's), (4, 6503), (5, 6551), (6, 6560), (7, 6635), (8, 6734), (9, 6779), (10, 6812), (11, 6815), (12, 6845), (13, 6866), (14, 6881), (15, 6890), (16, 6908), (18, 7010), (26, 7520),

Gene: Beem\_13 Start: 7051, Stop: 8154, Start Num: 2

Candidate Starts for Beem\_13:

(Start: 2 @7051 has 39 MA's), (4, 7069), (5, 7117), (6, 7126), (7, 7201), (8, 7300), (9, 7345), (10, 7378), (11, 7381), (12, 7411), (13, 7432), (14, 7447), (15, 7456), (16, 7474), (18, 7576), (26, 8086),

Gene: Bobby\_14 Start: 6778, Stop: 8106, Start Num: 2

Candidate Starts for Bobby\_14:

(Start: 2 @6778 has 39 MA's), (4, 6796), (5, 6844), (6, 6853), (7, 6928), (8, 7027), (10, 7105), (11, 7108), (12, 7138), (13, 7159), (14, 7174), (15, 7183), (18, 7303), (25, 7789), (27, 7816), (30, 8038),

Gene: Bombitas\_10 Start: 6360, Stop: 7463, Start Num: 2

Candidate Starts for Bombitas\_10:

(Start: 2 @6360 has 39 MA's), (4, 6378), (5, 6426), (6, 6435), (7, 6510), (8, 6609), (10, 6687), (11, 6690), (12, 6720), (13, 6741), (14, 6756), (15, 6765), (16, 6783), (18, 6885), (26, 7395),

Gene: Constella\_8 Start: 5869, Stop: 6972, Start Num: 2

Candidate Starts for Constella\_8:

(Start: 2 @5869 has 39 MA's), (4, 5887), (5, 5935), (6, 5944), (7, 6019), (8, 6118), (9, 6163), (10, 6196), (11, 6199), (12, 6229), (13, 6250), (14, 6265), (15, 6274), (16, 6292), (18, 6394), (26, 6904),

Gene: Courthouse\_13 Start: 6666, Stop: 7937, Start Num: 2

Candidate Starts for Courthouse\_13:

(Start: 2 @6666 has 39 MA's), (4, 6684), (5, 6732), (6, 6741), (7, 6816), (8, 6915), (11, 6996), (13, 7047), (14, 7062), (15, 7071), (17, 7161), (18, 7191), (25, 7620), (29, 7767), (30, 7869),

Gene: Dallas\_12 Start: 6590, Stop: 7693, Start Num: 2

Candidate Starts for Dallas\_12:

(Start: 2 @6590 has 39 MA's), (4, 6608), (5, 6656), (6, 6665), (7, 6740), (8, 6839), (10, 6917), (11, 6920), (12, 6950), (13, 6971), (14, 6986), (15, 6995), (16, 7013), (18, 7115), (26, 7625),

Gene: DmpstrDiver\_12 Start: 7231, Stop: 8334, Start Num: 2

Candidate Starts for DmpstrDiver\_12:

(Start: 2 @7231 has 39 MA's), (4, 7249), (5, 7297), (6, 7306), (7, 7381), (8, 7480), (10, 7558), (11, 7561), (12, 7591), (13, 7612), (14, 7627), (15, 7636), (16, 7654), (18, 7756), (26, 8266),

Gene: Dove\_11 Start: 6425, Stop: 7462, Start Num: 5

Candidate Starts for Dove\_11:

(Start: 2 @6359 has 39 MA's), (4, 6377), (5, 6425), (6, 6434), (7, 6509), (8, 6608), (10, 6686), (11, 6689), (12, 6719), (13, 6740), (14, 6755), (15, 6764), (16, 6782), (18, 6884), (26, 7394),

Gene: Duke13\_9 Start: 6616, Stop: 7719, Start Num: 2

Candidate Starts for Duke13\_9:

(Start: 2 @6616 has 39 MA's), (4, 6634), (5, 6682), (6, 6691), (7, 6766), (8, 6865), (10, 6943), (11, 6946), (12, 6976), (13, 6997), (14, 7012), (15, 7021), (16, 7039), (18, 7141), (26, 7651),

Gene: Ejimix\_14 Start: 7801, Stop: 8904, Start Num: 2

Candidate Starts for Ejimix\_14:

(Start: 2 @7801 has 39 MA's), (4, 7819), (5, 7867), (6, 7876), (7, 7951), (8, 8050), (10, 8128), (11, 8131), (12, 8161), (13, 8182), (14, 8197), (15, 8206), (16, 8224), (18, 8326), (26, 8836),

Gene: EricMillard\_13 Start: 7336, Stop: 8439, Start Num: 2

Candidate Starts for EricMillard\_13:

(Start: 2 @7336 has 39 MA's), (4, 7354), (5, 7402), (6, 7411), (7, 7486), (8, 7585), (10, 7663), (11, 7666), (12, 7696), (13, 7717), (14, 7732), (15, 7741), (16, 7759), (18, 7861), (26, 8371),

Gene: Gonephishing\_13 Start: 7188, Stop: 8276, Start Num: 2

Candidate Starts for Gonephishing\_13:

(1, 7056), (Start: 2 @7188 has 39 MA's), (3, 7194), (5, 7254), (6, 7263), (7, 7338), (8, 7437), (11, 7518), (12, 7548), (13, 7569), (14, 7584), (15, 7593), (16, 7611), (17, 7683), (18, 7713), (19, 7872), (20, 7875), (21, 7905), (22, 7980), (28, 8085), (30, 8208),

Gene: Halley\_13 Start: 7051, Stop: 8154, Start Num: 2

Candidate Starts for Halley\_13:

(Start: 2 @7051 has 39 MA's), (4, 7069), (5, 7117), (6, 7126), (7, 7201), (8, 7300), (10, 7378), (11, 7381), (12, 7411), (13, 7432), (14, 7447), (15, 7456), (16, 7474), (18, 7576), (26, 8086),

Gene: Hannaconda\_10 Start: 5346, Stop: 6617, Start Num: 2

Candidate Starts for Hannaconda\_10:

(Start: 2 @5346 has 39 MA's), (4, 5364), (5, 5412), (6, 5421), (7, 5496), (8, 5595), (11, 5676), (13, 5727), (14, 5742), (15, 5751), (17, 5841), (18, 5871), (25, 6300), (29, 6447), (30, 6549),

Gene: HokkenD\_8 Start: 6619, Stop: 7722, Start Num: 2

Candidate Starts for HokkenD\_8:

(Start: 2 @6619 has 39 MA's), (4, 6637), (5, 6685), (6, 6694), (7, 6769), (8, 6868), (10, 6946), (11, 6949), (12, 6979), (13, 7000), (14, 7015), (15, 7024), (16, 7042), (18, 7144), (26, 7654),

Gene: Hughesyang\_12 Start: 7231, Stop: 8334, Start Num: 2

Candidate Starts for Hughesyang\_12:

(Start: 2 @7231 has 39 MA's), (4, 7249), (5, 7297), (6, 7306), (7, 7381), (8, 7480), (10, 7558), (11, 7561), (12, 7591), (13, 7612), (14, 7627), (15, 7636), (16, 7654), (18, 7756), (26, 8266),

Gene: JuicyJay\_14 Start: 7881, Stop: 8984, Start Num: 2

Candidate Starts for JuicyJay\_14:

(Start: 2 @7881 has 39 MA's), (4, 7899), (5, 7947), (6, 7956), (7, 8031), (8, 8130), (10, 8208), (11, 8211), (12, 8241), (13, 8262), (14, 8277), (15, 8286), (16, 8304), (18, 8406), (26, 8916),

Gene: Kalah2\_13 Start: 7650, Stop: 8753, Start Num: 2

Candidate Starts for Kalah2\_13:

(Start: 2 @7650 has 39 MA's), (4, 7668), (5, 7716), (6, 7725), (7, 7800), (8, 7899), (9, 7944), (10, 7977), (11, 7980), (12, 8010), (13, 8031), (14, 8046), (15, 8055), (16, 8073), (18, 8175), (26, 8685),

Gene: KashFlow\_7 Start: 4912, Stop: 6183, Start Num: 2

Candidate Starts for KashFlow\_7:

(Start: 2 @4912 has 39 MA's), (4, 4930), (5, 4978), (6, 4987), (7, 5062), (8, 5161), (11, 5242), (13, 5293), (14, 5308), (15, 5317), (17, 5407), (18, 5437), (25, 5866), (29, 6013), (30, 6115),

Gene: Klein\_13 Start: 6627, Stop: 7730, Start Num: 2

Candidate Starts for Klein\_13:

(Start: 2 @6627 has 39 MA's), (4, 6645), (5, 6693), (6, 6702), (7, 6777), (8, 6876), (10, 6954), (11, 6957), (12, 6987), (13, 7008), (14, 7023), (15, 7032), (16, 7050), (18, 7152), (26, 7662),

Gene: LittleE\_12 Start: 7039, Stop: 8130, Start Num: 2

Candidate Starts for LittleE\_12:

(1, 6907), (Start: 2 @7039 has 39 MA's), (3, 7045), (5, 7105), (6, 7114), (7, 7189), (8, 7288), (11, 7369), (13, 7420), (14, 7435), (15, 7444), (16, 7462), (17, 7534), (18, 7564), (20, 7723), (22, 7828), (24, 7864), (28, 7933), (30, 8062),

Gene: Lucky2013\_13 Start: 6410, Stop: 7681, Start Num: 2

Candidate Starts for Lucky2013\_13:

(1, 6278), (Start: 2 @6410 has 39 MA's), (3, 6416), (5, 6476), (6, 6485), (7, 6560), (8, 6659), (11, 6740), (13, 6791), (14, 6806), (15, 6815), (16, 6833), (17, 6905), (18, 6935), (20, 7094), (23, 7310), (25, 7364), (30, 7613),

Gene: MiaZeal\_13 Start: 6485, Stop: 7756, Start Num: 2

Candidate Starts for MiaZeal\_13:

(Start: 2 @6485 has 39 MA's), (4, 6503), (5, 6551), (6, 6560), (7, 6635), (8, 6734), (11, 6815), (13, 6866), (14, 6881), (15, 6890), (17, 6980), (18, 7010), (25, 7439), (29, 7586), (30, 7688),

Gene: Minerva\_12 Start: 7110, Stop: 8213, Start Num: 2

Candidate Starts for Minerva\_12:

(Start: 2 @7110 has 39 MA's), (4, 7128), (5, 7176), (6, 7185), (7, 7260), (8, 7359), (10, 7437), (11, 7440), (12, 7470), (13, 7491), (14, 7506), (15, 7515), (16, 7533), (18, 7635), (26, 8145),

Gene: NihilNomen\_12 Start: 7110, Stop: 8213, Start Num: 2

Candidate Starts for NihilNomen\_12:

(Start: 2 @7110 has 39 MA's), (4, 7128), (5, 7176), (6, 7185), (7, 7260), (8, 7359), (10, 7437), (11, 7440), (12, 7470), (13, 7491), (14, 7506), (15, 7515), (16, 7533), (18, 7635), (26, 8145),

Gene: Odette\_12 Start: 6589, Stop: 7692, Start Num: 2

Candidate Starts for Odette\_12:

(Start: 2 @6589 has 39 MA's), (4, 6607), (5, 6655), (6, 6664), (7, 6739), (8, 6838), (10, 6916), (11, 6919), (12, 6949), (13, 6970), (14, 6985), (15, 6994), (16, 7012), (18, 7114), (26, 7624),

Gene: Omega\_14 Start: 8384, Stop: 9655, Start Num: 2

Candidate Starts for Omega\_14:

(1, 8252), (Start: 2 @8384 has 39 MA's), (4, 8402), (5, 8450), (6, 8459), (7, 8534), (8, 8633), (9, 8678), (11, 8714), (13, 8765), (14, 8780), (15, 8789), (16, 8807), (17, 8879), (18, 8909), (25, 9338), (29, 9485), (30, 9587),

Gene: Optimus\_10 Start: 6616, Stop: 7719, Start Num: 2

Candidate Starts for Optimus\_10:

(Start: 2 @6616 has 39 MA's), (4, 6634), (5, 6682), (6, 6691), (7, 6766), (8, 6865), (10, 6943), (11, 6946), (12, 6976), (13, 6997), (14, 7012), (15, 7021), (16, 7039), (18, 7141), (26, 7651),

Gene: Phoebus\_13 Start: 7336, Stop: 8439, Start Num: 2

Candidate Starts for Phoebus\_13:

(Start: 2 @7336 has 39 MA's), (4, 7354), (5, 7402), (6, 7411), (7, 7486), (8, 7585), (10, 7663), (11, 7666), (12, 7696), (13, 7717), (14, 7732), (15, 7741), (16, 7759), (18, 7861), (26, 8371),

Gene: Porcelain\_13 Start: 6485, Stop: 7756, Start Num: 2

Candidate Starts for Porcelain\_13:

(Start: 2 @6485 has 39 MA's), (4, 6503), (5, 6551), (6, 6560), (7, 6635), (8, 6734), (11, 6815), (13, 6866), (14, 6881), (15, 6890), (17, 6980), (18, 7010), (25, 7439), (29, 7586), (30, 7688),

Gene: Pound\_12 Start: 7106, Stop: 8209, Start Num: 2

Candidate Starts for Pound\_12:

(Start: 2 @7106 has 39 MA's), (4, 7124), (5, 7172), (6, 7181), (7, 7256), (8, 7355), (10, 7433), (11, 7436), (12, 7466), (13, 7487), (14, 7502), (15, 7511), (16, 7529), (18, 7631), (26, 8141),

Gene: Redno2\_12 Start: 6821, Stop: 7924, Start Num: 2

Candidate Starts for Redno2\_12:

(Start: 2 @6821 has 39 MA's), (4, 6839), (5, 6887), (6, 6896), (7, 6971), (8, 7070), (9, 7115), (10, 7148), (11, 7151), (12, 7181), (13, 7202), (14, 7217), (15, 7226), (16, 7244), (18, 7346), (26, 7856),

Gene: Schatzie\_11 Start: 6360, Stop: 7463, Start Num: 2

Candidate Starts for Schatzie\_11:

(Start: 2 @6360 has 39 MA's), (4, 6378), (5, 6426), (6, 6435), (7, 6510), (8, 6609), (10, 6687), (11, 6690), (12, 6720), (13, 6741), (14, 6756), (15, 6765), (16, 6783), (18, 6885), (26, 7395),

Gene: Squint\_13 Start: 6410, Stop: 7501, Start Num: 2

Candidate Starts for Squint\_13:

(1, 6278), (Start: 2 @6410 has 39 MA's), (3, 6416), (5, 6476), (6, 6485), (7, 6560), (8, 6659), (11, 6740), (12, 6770), (13, 6791), (14, 6806), (15, 6815), (16, 6833), (17, 6905), (18, 6935), (20, 7094), (22, 7199), (24, 7235), (28, 7304), (30, 7433),

Gene: Superphikiman\_13 Start: 6666, Stop: 7937, Start Num: 2

Candidate Starts for Superphikiman\_13:

(Start: 2 @6666 has 39 MA's), (4, 6684), (5, 6732), (6, 6741), (7, 6816), (8, 6915), (11, 6996), (13, 7047), (14, 7062), (15, 7071), (17, 7161), (18, 7191), (25, 7620), (29, 7767), (30, 7869),

Gene: Thibault\_9 Start: 6616, Stop: 7719, Start Num: 2

Candidate Starts for Thibault\_9:

(Start: 2 @6616 has 39 MA's), (4, 6634), (5, 6682), (6, 6691), (7, 6766), (8, 6865), (9, 6910), (10, 6943), (11, 6946), (12, 6976), (13, 6997), (14, 7012), (15, 7021), (16, 7039), (18, 7141), (26, 7651),

Gene: ThreeRngTarjay\_12 Start: 7106, Stop: 8209, Start Num: 2

Candidate Starts for ThreeRngTarjay\_12:

(Start: 2 @7106 has 39 MA's), (4, 7124), (5, 7172), (6, 7181), (7, 7256), (8, 7355), (10, 7433), (11, 7436), (12, 7466), (13, 7487), (14, 7502), (15, 7511), (16, 7529), (18, 7631), (26, 8141),

Gene: Wanda\_13 Start: 6627, Stop: 7730, Start Num: 2

Candidate Starts for Wanda\_13:

(Start: 2 @6627 has 39 MA's), (4, 6645), (5, 6693), (6, 6702), (7, 6777), (8, 6876), (10, 6954), (11, 6957), (12, 6987), (13, 7008), (14, 7023), (15, 7032), (16, 7050), (18, 7152), (26, 7662),

Gene: Yeet\_11 Start: 6360, Stop: 7463, Start Num: 2

Candidate Starts for Yeet\_11:

(Start: 2 @6360 has 39 MA's), (4, 6378), (5, 6426), (6, 6435), (7, 6510), (8, 6609), (10, 6687), (11, 6690), (12, 6720), (13, 6741), (14, 6756), (15, 6765), (16, 6783), (18, 6885), (26, 7395),

Gene: Zelink\_13 Start: 7134, Stop: 8237, Start Num: 2

Candidate Starts for Zelink\_13:

(Start: 2 @7134 has 39 MA's), (4, 7152), (5, 7200), (6, 7209), (7, 7284), (8, 7383), (10, 7461), (11, 7464), (12, 7494), (13, 7515), (14, 7530), (15, 7539), (18, 7659), (26, 8169),