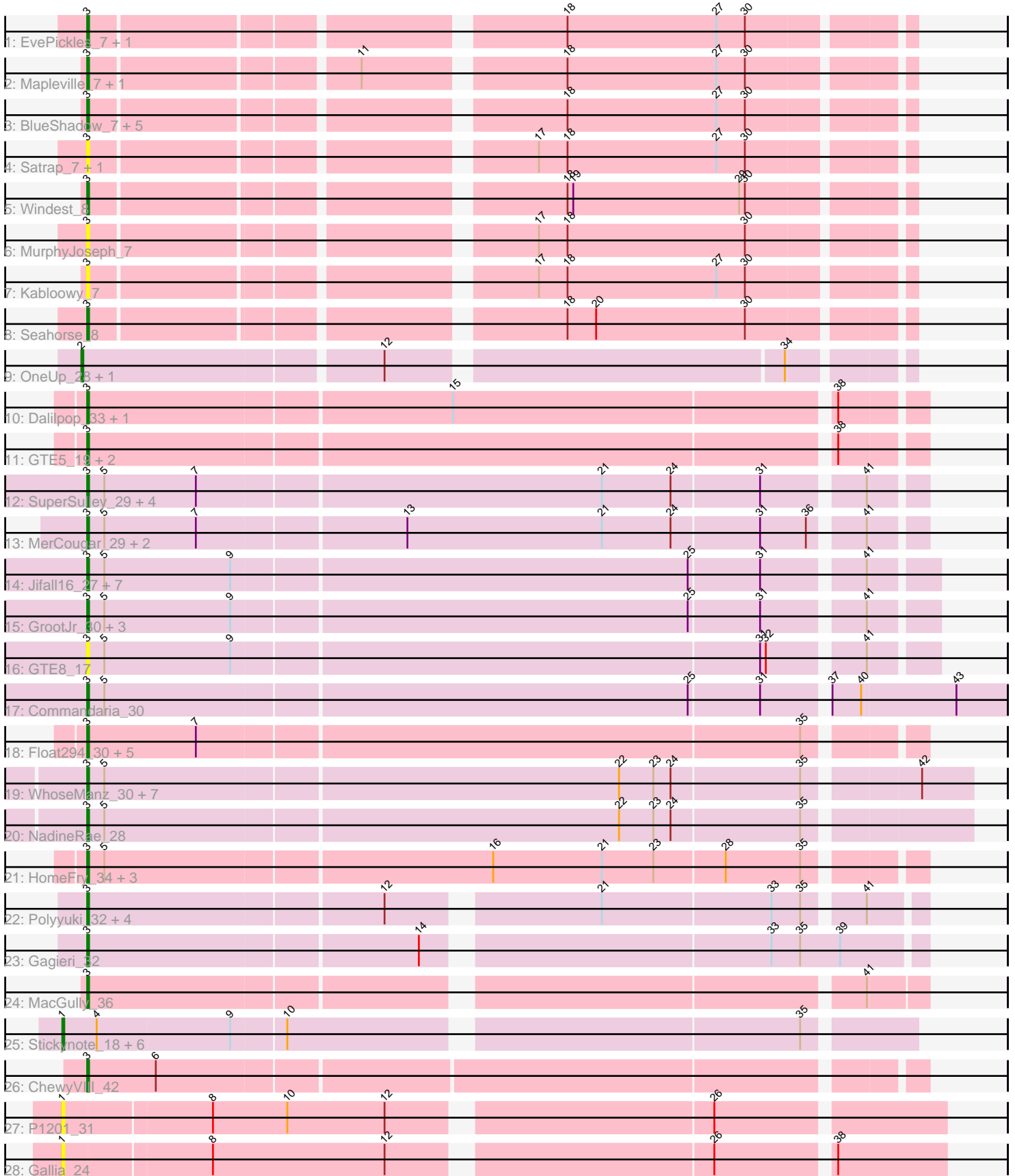


Pham 296493



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 296493 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296493 has 81 members, 13 are drafts.

Phages represented in each track:

- Track 1 : EvePickles_7, Sashimi_8
- Track 2 : Mapleville_7, Lawnathon_7
- Track 3 : BlueShadow_7, Phrank15_6, RadFad_7, LeBruni_7, Hillester_7, MidnightRain_7
- Track 4 : Satrap_7, Shukran_7
- Track 5 : Windest_8
- Track 6 : MurphyJoseph_7
- Track 7 : Kabloowy_7
- Track 8 : Seahorse_8
- Track 9 : OneUp_28, BrutonGaster_22
- Track 10 : Dalilpop_33, GRU1_18
- Track 11 : GTE5_19, Flapper_32, Turuncu_32
- Track 12 : SuperSulley_29, Kabluna_31, NosilaM_31, Buggaboo_29, Bonum_31
- Track 13 : MerCougar_29, Outis_29, StarStruck_29
- Track 14 : Jifall16_27, Tracker_28, Foxboro_29, Emianna_28, NatB6_28, Phomeo_27, Kurt_28, KidneyBean_28
- Track 15 : GrootJr_30, Arti_28, NovumRegina_28, Wheezy_28
- Track 16 : GTE8_17
- Track 17 : Commandaria_30
- Track 18 : Float294_30, Patio_31, Skysand_30, Ennea_34, RedRaider_35, Lollipop1437_33
- Track 19 : WhoseManz_30, HubbaBubba_26, Sukkupi_30, BiPauneto_31, Pemberton_31, Marietta_30, IDyn_29, Yndexa_30
- Track 20 : NadineRae_28
- Track 21 : HomeFry_34, Scuba_37, Fury_37, Pleakley_37
- Track 22 : Polyuyuki_32, Braxoaddie_32, Apiary_32, Maselop_32, CoffeeBean_32
- Track 23 : Gagieri_32
- Track 24 : MacGully_36
- Track 25 : Stickynote_18, Zion_16, Cruella_16, Darwin_19, C3PO_16, PotatoChip_16, Kimchi1738_16
- Track 26 : ChewyVIII_42
- Track 27 : P1201_31
- Track 28 : Gallia_24

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

The start number called the most often in the published annotations is 3, it was called in 59 of the 68 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apiary_32, Arti_28, BiPauneto_31, BlueShadow_7, Bonum_31, Braxoaddie_32, Buggaboo_29, ChewyVIII_42, CoffeeBean_32, Commandaria_30, Dalilpop_33, Emianna_28, Ennea_34, EvePickles_7, Flapper_32, Float294_30, Foxboro_29, Fury_37, GRU1_18, GTE5_19, GTE8_17, Gagieri_32, GrootJr_30, Hillester_7, HomeFry_34, HubbaBubba_26, IDyn_29, Jifall16_27, Kabloowy_7, Kabluna_31, KidneyBean_28, Kurt_28, Lawnathon_7, LeBruni_7, Lollipop1437_33, MacGully_36, Mapleville_7, Marietta_30, Maselop_32, MerCougar_29, MidnightRain_7, MurphyJoseph_7, NadineRae_28, NatB6_28, NosilaM_31, NovumRegina_28, Outis_29, Patio_31, Pemberton_31, Phomeo_27, Phrank15_6, Pleakley_37, Polyyuki_32, RadFad_7, RedRaider_35, Sashimi_8, Satrap_7, Scuba_37, Seahorse_8, Shukran_7, Skysand_30, StarStruck_29, Sukkupi_30, SuperSulley_29, Tracker_28, Turuncu_32, Wheezy_28, WhoseManz_30, Windest_8, Yndexa_30,

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

-

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

- BrutonGaster_22, C3PO_16, Cruella_16, Darwin_19, Gallia_24, Kimchi1738_16, OneUp_28, P1201_31, PotatoChip_16, Stickynote_18, Zion_16,

Summary by start number:

Start 1:

- Found in 9 of 81 (11.1%) of genes in pham
- Manual Annotations of this start: 7 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_16 (EN), Cruella_16 (EN), Darwin_19 (EN), Gallia_24 (singleton), Kimchi1738_16 (EN), P1201_31 (singleton), PotatoChip_16 (EN), Stickynote_18 (EN), Zion_16 (EN),

Start 2:

- Found in 2 of 81 (2.5%) of genes in pham
- Manual Annotations of this start: 2 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_22 (CQ2), OneUp_28 (CQ2),

Start 3:

- Found in 70 of 81 (86.4%) of genes in pham
- Manual Annotations of this start: 59 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary_32 (CR6), Arti_28 (CR2), BiPauneto_31 (CR4), BlueShadow_7 (AY), Bonum_31 (CR2), Braxoaddie_32 (CR6), Buggaboo_29 (CR2), ChewyVIII_42 (singleton), CoffeeBean_32 (CR6), Commandaria_30 (CR2), Dalilpop_33 (CR1), Emianna_28 (CR2), Ennea_34 (CR3), EvePickles_7 (AY), Flapper_32 (CR1), Float294_30 (CR3), Foxboro_29 (CR2), Fury_37 (CR5), GRU1_18 (CR1), GTE5_19 (CR1), GTE8_17 (CR2), Gagieri_32 (CR6), GrootJr_30 (CR2), Hillester_7 (AY), HomeFry_34 (CR5), HubbaBubba_26

(CR4), IDyn_29 (CR4), Jifall16_27 (CR2), Kabloowy_7 (AY), Kabluna_31 (CR2), KidneyBean_28 (CR2), Kurt_28 (CR2), Lawnathon_7 (AY), LeBruni_7 (AY), Lollipop1437_33 (CR3), MacGully_36 (CR7), Mapleville_7 (AY), Marietta_30 (CR4), Maselop_32 (CR6), MerCougar_29 (CR2), MidnightRain_7 (AY), MurphyJoseph_7 (AY), NadineRae_28 (CR4), NatB6_28 (CR2), NosilaM_31 (CR2), NovumRegina_28 (CR2), Outis_29 (CR2), Patio_31 (CR3), Pemberton_31 (CR4), Phomeo_27 (CR2), Phrank15_6 (AY), Pleakley_37 (CR5), Polyuyki_32 (CR6), RadFad_7 (AY), RedRaider_35 (CR3), Sashimi_8 (AY), Satrap_7 (AY), Scuba_37 (CR5), Seahorse_8 (AY), Shukran_7 (AY), Skysand_30 (CR3), StarStruck_29 (CR2), Sukkupi_30 (CR4), SuperSulley_29 (CR2), Tracker_28 (CR2), Turuncu_32 (CR1), Wheezy_28 (CR2), WhoseManz_30 (CR4), Windest_8 (AY), Yndexa_30 (CR4),

Summary by clusters:

There are 11 clusters represented in this pham: CR2, CR3, singleton, EN, CR6, CR7, CR4, CR5, CR1, AY, CQ2,

Info for manual annotations of cluster AY:

- Start number 3 was manually annotated 11 times for cluster AY.

Info for manual annotations of cluster CQ2:

- Start number 2 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR1:

- Start number 3 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 3 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 3 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 3 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 3 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 3 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 3 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster EN:

- Start number 1 was manually annotated 7 times for cluster EN.

Gene Information:

Gene: Apiary_32 Start: 19572, Stop: 19976, Start Num: 3

Candidate Starts for Apiary_32:

(Start: 3 @19572 has 59 MA's), (12, 19722), (21, 19821), (33, 19908), (35, 19923), (41, 19950),

Gene: Arti_28 Start: 17591, Stop: 18016, Start Num: 3

Candidate Starts for Arti_28:

(Start: 3 @17591 has 59 MA's), (5, 17600), (9, 17666), (25, 17900), (31, 17936), (41, 17984),

Gene: BiPauneto_31 Start: 17447, Stop: 17893, Start Num: 3

Candidate Starts for BiPauneto_31:

(Start: 3 @17447 has 59 MA's), (5, 17456), (22, 17720), (23, 17738), (24, 17747), (35, 17813), (42, 17867),

Gene: BlueShadow_7 Start: 5476, Stop: 5871, Start Num: 3

Candidate Starts for BlueShadow_7:

(Start: 3 @5476 has 59 MA's), (18, 5701), (27, 5779), (30, 5794),

Gene: Bonum_31 Start: 17932, Stop: 18351, Start Num: 3

Candidate Starts for Bonum_31:

(Start: 3 @17932 has 59 MA's), (5, 17941), (7, 17989), (21, 18196), (24, 18232), (31, 18277), (41, 18325),

Gene: Braxoaddie_32 Start: 19561, Stop: 19965, Start Num: 3

Candidate Starts for Braxoaddie_32:

(Start: 3 @19561 has 59 MA's), (12, 19711), (21, 19810), (33, 19897), (35, 19912), (41, 19939),

Gene: BrutonGaster_22 Start: 10580, Stop: 10981, Start Num: 2

Candidate Starts for BrutonGaster_22:

(Start: 2 @10580 has 2 MA's), (12, 10730), (34, 10925),

Gene: Buggaboo_29 Start: 18417, Stop: 18836, Start Num: 3

Candidate Starts for Buggaboo_29:

(Start: 3 @18417 has 59 MA's), (5, 18426), (7, 18474), (21, 18681), (24, 18717), (31, 18762), (41, 18810),

Gene: C3PO_16 Start: 12160, Stop: 12579, Start Num: 1

Candidate Starts for C3PO_16:

(Start: 1 @12160 has 7 MA's), (4, 12178), (9, 12247), (10, 12274), (35, 12526),

Gene: ChewyVIII_42 Start: 25136, Stop: 25552, Start Num: 3

Candidate Starts for ChewyVIII_42:

(Start: 3 @25136 has 59 MA's), (6, 25172),

Gene: CoffeeBean_32 Start: 19516, Stop: 19920, Start Num: 3

Candidate Starts for CoffeeBean_32:

(Start: 3 @19516 has 59 MA's), (12, 19666), (21, 19765), (33, 19852), (35, 19867), (41, 19894),

Gene: Commandaria_30 Start: 18882, Stop: 19346, Start Num: 3

Candidate Starts for Commandaria_30:

(Start: 3 @18882 has 59 MA's), (5, 18891), (25, 19191), (31, 19227), (37, 19257), (40, 19272), (43, 19320),

Gene: Cruella_16 Start: 12160, Stop: 12579, Start Num: 1

Candidate Starts for Cruella_16:

(Start: 1 @12160 has 7 MA's), (4, 12178), (9, 12247), (10, 12274), (35, 12526),

Gene: Dalilpop_33 Start: 19952, Stop: 20371, Start Num: 3

Candidate Starts for Dalilpop_33:

(Start: 3 @19952 has 59 MA's), (15, 20138), (38, 20330),

Gene: Darwin_19 Start: 12905, Stop: 13324, Start Num: 1

Candidate Starts for Darwin_19:

(Start: 1 @12905 has 7 MA's), (4, 12923), (9, 12992), (10, 13019), (35, 13271),

Gene: Emianna_28 Start: 18630, Stop: 19055, Start Num: 3

Candidate Starts for Emianna_28:

(Start: 3 @18630 has 59 MA's), (5, 18639), (9, 18705), (25, 18939), (31, 18975), (41, 19023),

Gene: Ennea_34 Start: 19252, Stop: 19671, Start Num: 3

Candidate Starts for Ennea_34:

(Start: 3 @19252 has 59 MA's), (7, 19309), (35, 19618),

Gene: EvePickles_7 Start: 5532, Stop: 5927, Start Num: 3

Candidate Starts for EvePickles_7:

(Start: 3 @5532 has 59 MA's), (18, 5757), (27, 5835), (30, 5850),

Gene: Flapper_32 Start: 19033, Stop: 19452, Start Num: 3

Candidate Starts for Flapper_32:

(Start: 3 @19033 has 59 MA's), (38, 19411),

Gene: Float294_30 Start: 18694, Stop: 19113, Start Num: 3

Candidate Starts for Float294_30:

(Start: 3 @18694 has 59 MA's), (7, 18751), (35, 19060),

Gene: Foxboro_29 Start: 19136, Stop: 19561, Start Num: 3

Candidate Starts for Foxboro_29:

(Start: 3 @19136 has 59 MA's), (5, 19145), (9, 19211), (25, 19445), (31, 19481), (41, 19529),

Gene: Fury_37 Start: 18318, Stop: 18737, Start Num: 3

Candidate Starts for Fury_37:

(Start: 3 @18318 has 59 MA's), (5, 18327), (16, 18525), (21, 18582), (23, 18609), (28, 18645), (35, 18684),

Gene: GRU1_18 Start: 10918, Stop: 11337, Start Num: 3

Candidate Starts for GRU1_18:

(Start: 3 @10918 has 59 MA's), (15, 11104), (38, 11296),

Gene: GTE5_19 Start: 11921, Stop: 12340, Start Num: 3

Candidate Starts for GTE5_19:

(Start: 3 @11921 has 59 MA's), (38, 12299),

Gene: GTE8_17 Start: 11895, Stop: 12320, Start Num: 3

Candidate Starts for GTE8_17:

(Start: 3 @11895 has 59 MA's), (5, 11904), (9, 11970), (31, 12240), (32, 12243), (41, 12288),

Gene: Gagieri_32 Start: 19354, Stop: 19767, Start Num: 3

Candidate Starts for Gagieri_32:

(Start: 3 @19354 has 59 MA's), (14, 19522), (33, 19690), (35, 19705), (39, 19726),

Gene: Gallia_24 Start: 15906, Stop: 16340, Start Num: 1

Candidate Starts for Gallia_24:

(Start: 1 @15906 has 7 MA's), (8, 15981), (12, 16071), (26, 16227), (38, 16284),

Gene: GrootJr_30 Start: 17986, Stop: 18411, Start Num: 3

Candidate Starts for GrootJr_30:

(Start: 3 @17986 has 59 MA's), (5, 17995), (9, 18061), (25, 18295), (31, 18331), (41, 18379),

Gene: Hillester_7 Start: 5476, Stop: 5871, Start Num: 3

Candidate Starts for Hillester_7:

(Start: 3 @5476 has 59 MA's), (18, 5701), (27, 5779), (30, 5794),

Gene: HomeFry_34 Start: 16990, Stop: 17409, Start Num: 3

Candidate Starts for HomeFry_34:

(Start: 3 @16990 has 59 MA's), (5, 16999), (16, 17197), (21, 17254), (23, 17281), (28, 17317), (35, 17356),

Gene: HubbaBubba_26 Start: 14465, Stop: 14911, Start Num: 3

Candidate Starts for HubbaBubba_26:

(Start: 3 @14465 has 59 MA's), (5, 14474), (22, 14738), (23, 14756), (24, 14765), (35, 14831), (42, 14885),

Gene: IDyn_29 Start: 15861, Stop: 16307, Start Num: 3

Candidate Starts for IDyn_29:

(Start: 3 @15861 has 59 MA's), (5, 15870), (22, 16134), (23, 16152), (24, 16161), (35, 16227), (42, 16281),

Gene: Jifall16_27 Start: 18266, Stop: 18691, Start Num: 3

Candidate Starts for Jifall16_27:

(Start: 3 @18266 has 59 MA's), (5, 18275), (9, 18341), (25, 18575), (31, 18611), (41, 18659),

Gene: Kabloowy_7 Start: 5558, Stop: 5953, Start Num: 3

Candidate Starts for Kabloowy_7:

(Start: 3 @5558 has 59 MA's), (17, 5768), (18, 5783), (27, 5861), (30, 5876),

Gene: Kabluna_31 Start: 17332, Stop: 17751, Start Num: 3

Candidate Starts for Kabluna_31:

(Start: 3 @17332 has 59 MA's), (5, 17341), (7, 17389), (21, 17596), (24, 17632), (31, 17677), (41, 17725),

Gene: KidneyBean_28 Start: 18378, Stop: 18803, Start Num: 3

Candidate Starts for KidneyBean_28:

(Start: 3 @18378 has 59 MA's), (5, 18387), (9, 18453), (25, 18687), (31, 18723), (41, 18771),

Gene: Kimchi1738_16 Start: 11758, Stop: 12177, Start Num: 1

Candidate Starts for Kimchi1738_16:

(Start: 1 @11758 has 7 MA's), (4, 11776), (9, 11845), (10, 11872), (35, 12124),

Gene: Kurt_28 Start: 18645, Stop: 19070, Start Num: 3

Candidate Starts for Kurt_28:

(Start: 3 @18645 has 59 MA's), (5, 18654), (9, 18720), (25, 18954), (31, 18990), (41, 19038),

Gene: Lawnathon_7 Start: 5559, Stop: 5954, Start Num: 3
Candidate Starts for Lawnathon_7:
(Start: 3 @5559 has 59 MA's), (11, 5688), (18, 5784), (27, 5862), (30, 5877),

Gene: LeBruni_7 Start: 5531, Stop: 5926, Start Num: 3
Candidate Starts for LeBruni_7:
(Start: 3 @5531 has 59 MA's), (18, 5756), (27, 5834), (30, 5849),

Gene: Lollipop1437_33 Start: 19240, Stop: 19659, Start Num: 3
Candidate Starts for Lollipop1437_33:
(Start: 3 @19240 has 59 MA's), (7, 19297), (35, 19606),

Gene: MacGully_36 Start: 19536, Stop: 19943, Start Num: 3
Candidate Starts for MacGully_36:
(Start: 3 @19536 has 59 MA's), (41, 19914),

Gene: Mapleville_7 Start: 5629, Stop: 6024, Start Num: 3
Candidate Starts for Mapleville_7:
(Start: 3 @5629 has 59 MA's), (11, 5758), (18, 5854), (27, 5932), (30, 5947),

Gene: Marietta_30 Start: 15781, Stop: 16227, Start Num: 3
Candidate Starts for Marietta_30:
(Start: 3 @15781 has 59 MA's), (5, 15790), (22, 16054), (23, 16072), (24, 16081), (35, 16147), (42, 16201),

Gene: Maselop_32 Start: 19592, Stop: 19996, Start Num: 3
Candidate Starts for Maselop_32:
(Start: 3 @19592 has 59 MA's), (12, 19742), (21, 19841), (33, 19928), (35, 19943), (41, 19970),

Gene: MerCougar_29 Start: 18538, Stop: 18957, Start Num: 3
Candidate Starts for MerCougar_29:
(Start: 3 @18538 has 59 MA's), (5, 18547), (7, 18595), (13, 18700), (21, 18802), (24, 18838), (31, 18883), (36, 18907), (41, 18931),

Gene: MidnightRain_7 Start: 5476, Stop: 5871, Start Num: 3
Candidate Starts for MidnightRain_7:
(Start: 3 @5476 has 59 MA's), (18, 5701), (27, 5779), (30, 5794),

Gene: MurphyJoseph_7 Start: 5487, Stop: 5882, Start Num: 3
Candidate Starts for MurphyJoseph_7:
(Start: 3 @5487 has 59 MA's), (17, 5697), (18, 5712), (30, 5805),

Gene: NadineRae_28 Start: 15027, Stop: 15473, Start Num: 3
Candidate Starts for NadineRae_28:
(Start: 3 @15027 has 59 MA's), (5, 15036), (22, 15300), (23, 15318), (24, 15327), (35, 15393),

Gene: NatB6_28 Start: 17654, Stop: 18079, Start Num: 3
Candidate Starts for NatB6_28:
(Start: 3 @17654 has 59 MA's), (5, 17663), (9, 17729), (25, 17963), (31, 17999), (41, 18047),

Gene: NosilaM_31 Start: 18229, Stop: 18648, Start Num: 3
Candidate Starts for NosilaM_31:

(Start: 3 @18229 has 59 MA's), (5, 18238), (7, 18286), (21, 18493), (24, 18529), (31, 18574), (41, 18622),

Gene: NovumRegina_28 Start: 17985, Stop: 18410, Start Num: 3

Candidate Starts for NovumRegina_28:

(Start: 3 @17985 has 59 MA's), (5, 17994), (9, 18060), (25, 18294), (31, 18330), (41, 18378),

Gene: OneUp_28 Start: 11666, Stop: 12067, Start Num: 2

Candidate Starts for OneUp_28:

(Start: 2 @11666 has 2 MA's), (12, 11816), (34, 12011),

Gene: Outis_29 Start: 18232, Stop: 18651, Start Num: 3

Candidate Starts for Outis_29:

(Start: 3 @18232 has 59 MA's), (5, 18241), (7, 18289), (13, 18394), (21, 18496), (24, 18532), (31, 18577), (36, 18601), (41, 18625),

Gene: P1201_31 Start: 19091, Stop: 19525, Start Num: 1

Candidate Starts for P1201_31:

(Start: 1 @19091 has 7 MA's), (8, 19166), (10, 19205), (12, 19256), (26, 19412),

Gene: Patio_31 Start: 18476, Stop: 18895, Start Num: 3

Candidate Starts for Patio_31:

(Start: 3 @18476 has 59 MA's), (7, 18533), (35, 18842),

Gene: Pemberton_31 Start: 15764, Stop: 16210, Start Num: 3

Candidate Starts for Pemberton_31:

(Start: 3 @15764 has 59 MA's), (5, 15773), (22, 16037), (23, 16055), (24, 16064), (35, 16130), (42, 16184),

Gene: Phomeo_27 Start: 18280, Stop: 18705, Start Num: 3

Candidate Starts for Phomeo_27:

(Start: 3 @18280 has 59 MA's), (5, 18289), (9, 18355), (25, 18589), (31, 18625), (41, 18673),

Gene: Phrank15_6 Start: 5630, Stop: 6025, Start Num: 3

Candidate Starts for Phrank15_6:

(Start: 3 @5630 has 59 MA's), (18, 5855), (27, 5933), (30, 5948),

Gene: Pleakley_37 Start: 18319, Stop: 18738, Start Num: 3

Candidate Starts for Pleakley_37:

(Start: 3 @18319 has 59 MA's), (5, 18328), (16, 18526), (21, 18583), (23, 18610), (28, 18646), (35, 18685),

Gene: Polyzuki_32 Start: 19584, Stop: 19988, Start Num: 3

Candidate Starts for Polyzuki_32:

(Start: 3 @19584 has 59 MA's), (12, 19734), (21, 19833), (33, 19920), (35, 19935), (41, 19962),

Gene: PotatoChip_16 Start: 12127, Stop: 12546, Start Num: 1

Candidate Starts for PotatoChip_16:

(Start: 1 @12127 has 7 MA's), (4, 12145), (9, 12214), (10, 12241), (35, 12493),

Gene: RadFad_7 Start: 5476, Stop: 5871, Start Num: 3

Candidate Starts for RadFad_7:

(Start: 3 @5476 has 59 MA's), (18, 5701), (27, 5779), (30, 5794),

Gene: RedRaider_35 Start: 20480, Stop: 20899, Start Num: 3

Candidate Starts for RedRaider_35:

(Start: 3 @20480 has 59 MA's), (7, 20537), (35, 20846),

Gene: Sashimi_8 Start: 5649, Stop: 6044, Start Num: 3

Candidate Starts for Sashimi_8:

(Start: 3 @5649 has 59 MA's), (18, 5874), (27, 5952), (30, 5967),

Gene: Satrap_7 Start: 5487, Stop: 5882, Start Num: 3

Candidate Starts for Satrap_7:

(Start: 3 @5487 has 59 MA's), (17, 5697), (18, 5712), (27, 5790), (30, 5805),

Gene: Scuba_37 Start: 18412, Stop: 18831, Start Num: 3

Candidate Starts for Scuba_37:

(Start: 3 @18412 has 59 MA's), (5, 18421), (16, 18619), (21, 18676), (23, 18703), (28, 18739), (35, 18778),

Gene: Seahorse_8 Start: 5761, Stop: 6156, Start Num: 3

Candidate Starts for Seahorse_8:

(Start: 3 @5761 has 59 MA's), (18, 5986), (20, 6001), (30, 6079),

Gene: Shukran_7 Start: 5487, Stop: 5882, Start Num: 3

Candidate Starts for Shukran_7:

(Start: 3 @5487 has 59 MA's), (17, 5697), (18, 5712), (27, 5790), (30, 5805),

Gene: Skysand_30 Start: 18696, Stop: 19115, Start Num: 3

Candidate Starts for Skysand_30:

(Start: 3 @18696 has 59 MA's), (7, 18753), (35, 19062),

Gene: StarStruck_29 Start: 18232, Stop: 18651, Start Num: 3

Candidate Starts for StarStruck_29:

(Start: 3 @18232 has 59 MA's), (5, 18241), (7, 18289), (13, 18394), (21, 18496), (24, 18532), (31, 18577), (36, 18601), (41, 18625),

Gene: Stickynote_18 Start: 12937, Stop: 13356, Start Num: 1

Candidate Starts for Stickynote_18:

(Start: 1 @12937 has 7 MA's), (4, 12955), (9, 13024), (10, 13051), (35, 13303),

Gene: Sukkupi_30 Start: 17338, Stop: 17784, Start Num: 3

Candidate Starts for Sukkupi_30:

(Start: 3 @17338 has 59 MA's), (5, 17347), (22, 17611), (23, 17629), (24, 17638), (35, 17704), (42, 17758),

Gene: SuperSulley_29 Start: 18417, Stop: 18836, Start Num: 3

Candidate Starts for SuperSulley_29:

(Start: 3 @18417 has 59 MA's), (5, 18426), (7, 18474), (21, 18681), (24, 18717), (31, 18762), (41, 18810),

Gene: Tracker_28 Start: 17408, Stop: 17833, Start Num: 3

Candidate Starts for Tracker_28:

(Start: 3 @17408 has 59 MA's), (5, 17417), (9, 17483), (25, 17717), (31, 17753), (41, 17801),

Gene: Turuncu_32 Start: 18728, Stop: 19147, Start Num: 3

Candidate Starts for Turuncu_32:

(Start: 3 @18728 has 59 MA's), (38, 19106),

Gene: Wheezy_28 Start: 17611, Stop: 18036, Start Num: 3

Candidate Starts for Wheezy_28:

(Start: 3 @17611 has 59 MA's), (5, 17620), (9, 17686), (25, 17920), (31, 17956), (41, 18004),

Gene: WhoseManz_30 Start: 15392, Stop: 15838, Start Num: 3

Candidate Starts for WhoseManz_30:

(Start: 3 @15392 has 59 MA's), (5, 15401), (22, 15665), (23, 15683), (24, 15692), (35, 15758), (42, 15812),

Gene: Windest_8 Start: 5547, Stop: 5942, Start Num: 3

Candidate Starts for Windest_8:

(Start: 3 @5547 has 59 MA's), (18, 5772), (19, 5775), (29, 5862), (30, 5865),

Gene: Yndexa_30 Start: 17338, Stop: 17784, Start Num: 3

Candidate Starts for Yndexa_30:

(Start: 3 @17338 has 59 MA's), (5, 17347), (22, 17611), (23, 17629), (24, 17638), (35, 17704), (42, 17758),

Gene: Zion_16 Start: 12125, Stop: 12544, Start Num: 1

Candidate Starts for Zion_16:

(Start: 1 @12125 has 7 MA's), (4, 12143), (9, 12212), (10, 12239), (35, 12491),