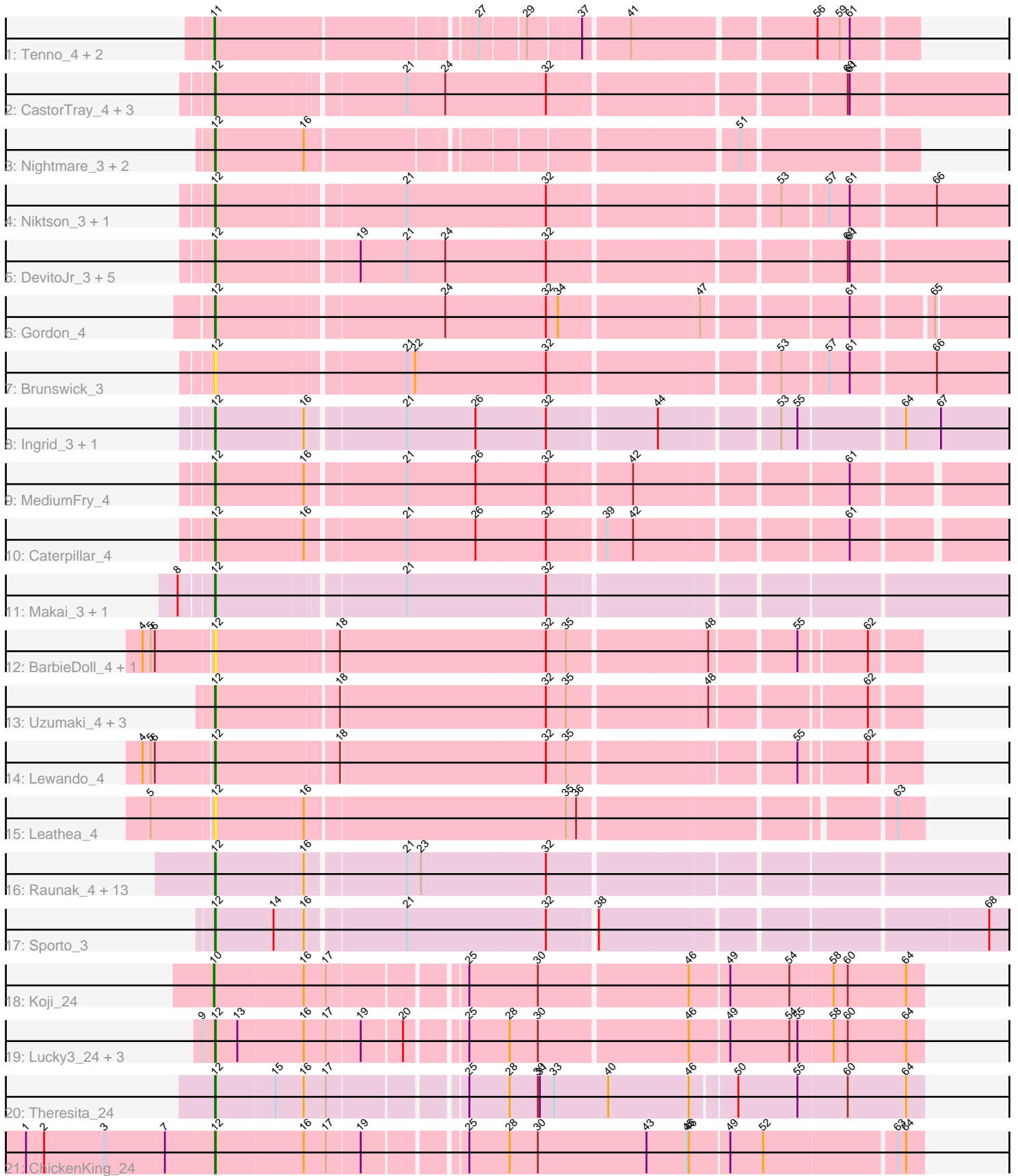


# Pham 157898



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 157898 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157898 has 56 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Tenno\_4, CapnMurica\_4, MiniBagel\_4
- Track 2 : CastorTray\_4, AreFloNak\_3, Nivinsha\_3, Tatanka\_3
- Track 3 : Nightmare\_3, Teacup\_4, Issa\_3
- Track 4 : Niktson\_3, ElephantMan\_3
- Track 5 : DevitoJr\_3, Darby\_3, ScienceWizSam\_4, Breylor17\_3, Trustiboi\_3, Synopsis\_3
- Track 6 : Gordon\_4
- Track 7 : Brunswick\_3
- Track 8 : Ingrid\_3, Loretta\_3
- Track 9 : MediumFry\_4
- Track 10 : Caterpillar\_4
- Track 11 : Makai\_3, Truckee\_3
- Track 12 : BarbieDoll\_4, Renaldo\_5
- Track 13 : Uzumaki\_4, Argan\_3, Zeina\_4, GantcherGoblin\_3
- Track 14 : Lewando\_4
- Track 15 : Leathea\_4
- Track 16 : Raunak\_4, MrAaronian\_4, Sloopyjoe\_4, Egad\_4, ProfFrink\_4, StarLord\_4, Djungelskog\_4, BronxBay\_4, Michelle\_4, Salk\_4, Shiba\_4, Linda\_4, Stayer\_4, DoctorPepper\_4
- Track 17 : Sporto\_3
- Track 18 : Koji\_24
- Track 19 : Lucky3\_24, Golden\_24, SirVictor\_24, Guetzie\_24
- Track 20 : Theresita\_24
- Track 21 : ChickenKing\_24

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

The start number called the most often in the published annotations is 12, it was called in 42 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AreFloNak\_3, Argan\_3, BarbieDoll\_4, Breylor17\_3, BronxBay\_4, Brunswick\_3, CastorTray\_4, Caterpillar\_4, ChickenKing\_24, Darby\_3, DevitoJr\_3, Djungelskog\_4, DoctorPepper\_4, Egad\_4, ElephantMan\_3, GantcherGoblin\_3, Golden\_24,

Gordon\_4, Guetzie\_24, Ingrid\_3, Issa\_3, Leathea\_4, Lewando\_4, Linda\_4, Loretta\_3, Lucky3\_24, Makai\_3, MediumFry\_4, Michelle\_4, MrAaronian\_4, Nightmare\_3, Niktson\_3, Nivinsha\_3, ProfFrink\_4, Raunak\_4, Renaldo\_5, Salk\_4, ScienceWizSam\_4, Shiba\_4, SirVictor\_24, Sloopyjoe\_4, Sporto\_3, StarLord\_4, Stayer\_4, Synepsis\_3, Tatanka\_3, Teacup\_4, Theresita\_24, Truckee\_3, Trustiboi\_3, Uzumaki\_4, Zeina\_4,

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

- 

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

- CapnMurica\_4, Koji\_24, MiniBagel\_4, Tenno\_4,

### Summary by start number:

Start 10:

- Found in 1 of 56 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Koji\_24 (EA4),

Start 11:

- Found in 3 of 56 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CapnMurica\_4 (AU1), MiniBagel\_4 (AU1), Tenno\_4 (AU1),

Start 12:

- Found in 52 of 56 ( 92.9% ) of genes in pham
- Manual Annotations of this start: 42 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_3 (AU1), Argan\_3 (AU6), BarbieDoll\_4 (AU6), Breylor17\_3 (AU1), BronxBay\_4 (AW), Brunswick\_3 (AU1), CastorTray\_4 (AU1), Caterpillar\_4 (AU4), ChickenKing\_24 (EA9), Darby\_3 (AU1), DevitoJr\_3 (AU1), Djungelskog\_4 (AW), DoctorPepper\_4 (AW), Egad\_4 (AW), ElephantMan\_3 (AU1), GantcherGoblin\_3 (AU6), Golden\_24 (EA4), Gordon\_4 (AU1), Guetzie\_24 (EA4), Ingrid\_3 (AU3), Issa\_3 (AU1), Leathea\_4 (AU6), Lewando\_4 (AU6), Linda\_4 (AW), Loretta\_3 (AU3), Lucky3\_24 (EA4), Makai\_3 (AU5), MediumFry\_4 (AU4), Michelle\_4 (AW), MrAaronian\_4 (AW), Nightmare\_3 (AU1), Niktson\_3 (AU1), Nivinsha\_3 (AU1), ProfFrink\_4 (AW), Raunak\_4 (AW), Renaldo\_5 (AU6), Salk\_4 (AW), ScienceWizSam\_4 (AU1), Shiba\_4 (AW), SirVictor\_24 (EA4), Sloopyjoe\_4 (AW), Sporto\_3 (AW), StarLord\_4 (AW), Stayer\_4 (AW), Synepsis\_3 (AU1), Tatanka\_3 (AU1), Teacup\_4 (AU1), Theresita\_24 (EA7), Truckee\_3 (AU5), Trustiboi\_3 (AU1), Uzumaki\_4 (AU6), Zeina\_4 (AU6),

### Summary by clusters:

There are 9 clusters represented in this pham: AU1, EA9, AU3, AU5, AU4, AW, AU6, EA4, EA7,

Info for manual annotations of cluster AU1:

- Start number 11 was manually annotated 2 times for cluster AU1.

- Start number 12 was manually annotated 13 times for cluster AU1.

Info for manual annotations of cluster AU3:

- Start number 12 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 12 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 12 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 12 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 12 was manually annotated 12 times for cluster AW.

Info for manual annotations of cluster EA4:

- Start number 10 was manually annotated 1 time for cluster EA4.
- Start number 12 was manually annotated 4 times for cluster EA4.

Info for manual annotations of cluster EA7:

- Start number 12 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA9:

- Start number 12 was manually annotated 1 time for cluster EA9.

### ***Gene Information:***

Gene: AreFloNak\_3 Start: 1412, Stop: 2536, Start Num: 12

Candidate Starts for AreFloNak\_3:

(Start: 12 @1412 has 42 MA's), (21, 1670), (24, 1727), (32, 1874), (60, 2282), (61, 2285),

Gene: Argan\_3 Start: 1237, Stop: 2217, Start Num: 12

Candidate Starts for Argan\_3:

(Start: 12 @1237 has 42 MA's), (18, 1408), (32, 1708), (35, 1738), (48, 1936), (62, 2146),

Gene: BarbieDoll\_4 Start: 1531, Stop: 2511, Start Num: 12

Candidate Starts for BarbieDoll\_4:

(4, 1432), (5, 1444), (6, 1450), (Start: 12 @1531 has 42 MA's), (18, 1702), (32, 2002), (35, 2032), (48, 2230), (55, 2347), (62, 2440),

Gene: Breylor17\_3 Start: 1537, Stop: 2661, Start Num: 12

Candidate Starts for Breylor17\_3:

(Start: 12 @1537 has 42 MA's), (19, 1726), (21, 1795), (24, 1852), (32, 1999), (60, 2407), (61, 2410),

Gene: BronxBay\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for BronxBay\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Brunswick\_3 Start: 1546, Stop: 2670, Start Num: 12

Candidate Starts for Brunswick\_3:

(Start: 12 @1546 has 42 MA's), (21, 1804), (22, 1816), (32, 2008), (53, 2323), (57, 2389), (61, 2419), (66, 2539),

Gene: CapnMurica\_4 Start: 2789, Stop: 3742, Start Num: 11

Candidate Starts for CapnMurica\_4:

(Start: 11 @2789 has 2 MA's), (27, 3149), (29, 3209), (37, 3281), (41, 3344), (56, 3599), (59, 3632), (61, 3647),

Gene: CastorTray\_4 Start: 1391, Stop: 2515, Start Num: 12

Candidate Starts for CastorTray\_4:

(Start: 12 @1391 has 42 MA's), (21, 1649), (24, 1706), (32, 1853), (60, 2261), (61, 2264),

Gene: Caterpillar\_4 Start: 1620, Stop: 2729, Start Num: 12

Candidate Starts for Caterpillar\_4:

(Start: 12 @1620 has 42 MA's), (16, 1746), (21, 1881), (26, 1983), (32, 2085), (39, 2160), (42, 2199), (61, 2493),

Gene: ChickenKing\_24 Start: 18340, Stop: 19338, Start Num: 12

Candidate Starts for ChickenKing\_24:

(1, 18061), (2, 18088), (3, 18178), (7, 18268), (Start: 12 @18340 has 42 MA's), (16, 18469), (17, 18502), (19, 18550), (25, 18682), (28, 18742), (30, 18784), (43, 18946), (45, 19006), (46, 19009), (49, 19063), (52, 19111), (63, 19300), (64, 19312),

Gene: Darby\_3 Start: 1394, Stop: 2518, Start Num: 12

Candidate Starts for Darby\_3:

(Start: 12 @1394 has 42 MA's), (19, 1583), (21, 1652), (24, 1709), (32, 1856), (60, 2264), (61, 2267),

Gene: DevitoJr\_3 Start: 1536, Stop: 2660, Start Num: 12

Candidate Starts for DevitoJr\_3:

(Start: 12 @1536 has 42 MA's), (19, 1725), (21, 1794), (24, 1851), (32, 1998), (60, 2406), (61, 2409),

Gene: Djungelskog\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Djungelskog\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: DoctorPepper\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for DoctorPepper\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Egad\_4 Start: 1440, Stop: 2573, Start Num: 12

Candidate Starts for Egad\_4:

(Start: 12 @1440 has 42 MA's), (16, 1566), (21, 1701), (23, 1722), (32, 1905),

Gene: ElephantMan\_3 Start: 1549, Stop: 2673, Start Num: 12

Candidate Starts for ElephantMan\_3:

(Start: 12 @1549 has 42 MA's), (21, 1807), (32, 2011), (53, 2326), (57, 2392), (61, 2422), (66, 2542),

Gene: GantcherGoblin\_3 Start: 1237, Stop: 2217, Start Num: 12

Candidate Starts for GantcherGoblin\_3:

(Start: 12 @1237 has 42 MA's), (18, 1408), (32, 1708), (35, 1738), (48, 1936), (62, 2146),

Gene: Golden\_24 Start: 18704, Stop: 19696, Start Num: 12

Candidate Starts for Golden\_24:

(9, 18686), (Start: 12 @18704 has 42 MA's), (13, 18734), (16, 18830), (17, 18863), (19, 18911), (20, 18968), (25, 19043), (28, 19103), (30, 19145), (46, 19358), (49, 19412), (54, 19499), (55, 19511), (58, 19562), (60, 19583), (64, 19670),

Gene: Gordon\_4 Start: 2678, Stop: 3787, Start Num: 12

Candidate Starts for Gordon\_4:

(Start: 12 @2678 has 42 MA's), (24, 2993), (32, 3140), (34, 3158), (47, 3353), (61, 3551), (65, 3659),

Gene: Guetzle\_24 Start: 18692, Stop: 19684, Start Num: 12

Candidate Starts for Guetzle\_24:

(9, 18674), (Start: 12 @18692 has 42 MA's), (13, 18722), (16, 18818), (17, 18851), (19, 18899), (20, 18956), (25, 19031), (28, 19091), (30, 19133), (46, 19346), (49, 19400), (54, 19487), (55, 19499), (58, 19550), (60, 19571), (64, 19658),

Gene: Ingrid\_3 Start: 1418, Stop: 2536, Start Num: 12

Candidate Starts for Ingrid\_3:

(Start: 12 @1418 has 42 MA's), (16, 1544), (21, 1679), (26, 1781), (32, 1883), (44, 2033), (53, 2195), (55, 2219), (64, 2366), (67, 2414),

Gene: Issa\_3 Start: 1538, Stop: 2491, Start Num: 12

Candidate Starts for Issa\_3:

(Start: 12 @1538 has 42 MA's), (16, 1664), (51, 2243),

Gene: Koji\_24 Start: 18752, Stop: 19747, Start Num: 10

Candidate Starts for Koji\_24:

(Start: 10 @18752 has 1 MA's), (16, 18881), (17, 18914), (25, 19094), (30, 19196), (46, 19409), (49, 19463), (54, 19550), (58, 19613), (60, 19634), (64, 19721),

Gene: Leathea\_4 Start: 1424, Stop: 2404, Start Num: 12

Candidate Starts for Leathea\_4:

(5, 1337), (Start: 12 @1424 has 42 MA's), (16, 1550), (35, 1922), (36, 1937), (63, 2366),

Gene: Lewando\_4 Start: 1530, Stop: 2510, Start Num: 12

Candidate Starts for Lewando\_4:

(4, 1431), (5, 1443), (6, 1449), (Start: 12 @1530 has 42 MA's), (18, 1701), (32, 2001), (35, 2031), (55, 2346), (62, 2439),

Gene: Linda\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Linda\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Loretta\_3 Start: 1418, Stop: 2536, Start Num: 12

Candidate Starts for Loretta\_3:

(Start: 12 @1418 has 42 MA's), (16, 1544), (21, 1679), (26, 1781), (32, 1883), (44, 2033), (53, 2195), (55, 2219), (64, 2366), (67, 2414),

Gene: Lucky3\_24 Start: 18704, Stop: 19696, Start Num: 12

Candidate Starts for Lucky3\_24:

(9, 18686), (Start: 12 @18704 has 42 MA's), (13, 18734), (16, 18830), (17, 18863), (19, 18911), (20, 18968), (25, 19043), (28, 19103), (30, 19145), (46, 19358), (49, 19412), (54, 19499), (55, 19511), (58, 19562), (60, 19583), (64, 19670),

Gene: Makai\_3 Start: 1476, Stop: 2600, Start Num: 12

Candidate Starts for Makai\_3:

(8, 1437), (Start: 12 @1476 has 42 MA's), (21, 1734), (32, 1938),

Gene: MediumFry\_4 Start: 1649, Stop: 2758, Start Num: 12

Candidate Starts for MediumFry\_4:

(Start: 12 @1649 has 42 MA's), (16, 1775), (21, 1910), (26, 2012), (32, 2114), (42, 2228), (61, 2522),

Gene: Michelle\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Michelle\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: MiniBagel\_4 Start: 2789, Stop: 3742, Start Num: 11

Candidate Starts for MiniBagel\_4:

(Start: 11 @2789 has 2 MA's), (27, 3149), (29, 3209), (37, 3281), (41, 3344), (56, 3599), (59, 3632), (61, 3647),

Gene: MrAaronian\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for MrAaronian\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Nightmare\_3 Start: 1557, Stop: 2510, Start Num: 12

Candidate Starts for Nightmare\_3:

(Start: 12 @1557 has 42 MA's), (16, 1683), (51, 2262),

Gene: Niktson\_3 Start: 1549, Stop: 2673, Start Num: 12

Candidate Starts for Niktson\_3:

(Start: 12 @1549 has 42 MA's), (21, 1807), (32, 2011), (53, 2326), (57, 2392), (61, 2422), (66, 2542),

Gene: Nivinsha\_3 Start: 1412, Stop: 2536, Start Num: 12

Candidate Starts for Nivinsha\_3:

(Start: 12 @1412 has 42 MA's), (21, 1670), (24, 1727), (32, 1874), (60, 2282), (61, 2285),

Gene: ProfFrink\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for ProfFrink\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Raunak\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Raunak\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Renaldo\_5 Start: 1531, Stop: 2511, Start Num: 12

Candidate Starts for Renaldo\_5:

(4, 1432), (5, 1444), (6, 1450), (Start: 12 @1531 has 42 MA's), (18, 1702), (32, 2002), (35, 2032), (48, 2230), (55, 2347), (62, 2440),

Gene: Salk\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Salk\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: ScienceWizSam\_4 Start: 1367, Stop: 2491, Start Num: 12

Candidate Starts for ScienceWizSam\_4:

(Start: 12 @1367 has 42 MA's), (19, 1556), (21, 1625), (24, 1682), (32, 1829), (60, 2237), (61, 2240),

Gene: Shiba\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Shiba\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: SirVictor\_24 Start: 18692, Stop: 19684, Start Num: 12

Candidate Starts for SirVictor\_24:

(9, 18674), (Start: 12 @18692 has 42 MA's), (13, 18722), (16, 18818), (17, 18851), (19, 18899), (20, 18956), (25, 19031), (28, 19091), (30, 19133), (46, 19346), (49, 19400), (54, 19487), (55, 19499), (58, 19550), (60, 19571), (64, 19658),

Gene: Sloopyjoe\_4 Start: 1440, Stop: 2573, Start Num: 12

Candidate Starts for Sloopyjoe\_4:

(Start: 12 @1440 has 42 MA's), (16, 1566), (21, 1701), (23, 1722), (32, 1905),

Gene: Sporto\_3 Start: 1392, Stop: 2516, Start Num: 12

Candidate Starts for Sporto\_3:

(Start: 12 @1392 has 42 MA's), (14, 1476), (16, 1518), (21, 1653), (32, 1857), (38, 1923), (68, 2463),

Gene: StarLord\_4 Start: 1440, Stop: 2573, Start Num: 12

Candidate Starts for StarLord\_4:

(Start: 12 @1440 has 42 MA's), (16, 1566), (21, 1701), (23, 1722), (32, 1905),

Gene: Stayer\_4 Start: 1439, Stop: 2572, Start Num: 12

Candidate Starts for Stayer\_4:

(Start: 12 @1439 has 42 MA's), (16, 1565), (21, 1700), (23, 1721), (32, 1904),

Gene: Synopsis\_3 Start: 1535, Stop: 2659, Start Num: 12

Candidate Starts for Synopsis\_3:

(Start: 12 @1535 has 42 MA's), (19, 1724), (21, 1793), (24, 1850), (32, 1997), (60, 2405), (61, 2408),

Gene: Tatanka\_3 Start: 1475, Stop: 2599, Start Num: 12

Candidate Starts for Tatanka\_3:

(Start: 12 @1475 has 42 MA's), (21, 1733), (24, 1790), (32, 1937), (60, 2345), (61, 2348),

Gene: Teacup\_4 Start: 1538, Stop: 2491, Start Num: 12

Candidate Starts for Teacup\_4:

(Start: 12 @1538 has 42 MA's), (16, 1664), (51, 2243),

Gene: Tenno\_4 Start: 2789, Stop: 3742, Start Num: 11

Candidate Starts for Tenno\_4:

(Start: 11 @2789 has 2 MA's), (27, 3149), (29, 3209), (37, 3281), (41, 3344), (56, 3599), (59, 3632), (61, 3647),

Gene: Theresita\_24 Start: 18223, Stop: 19221, Start Num: 12

Candidate Starts for Theresita\_24:

(Start: 12 @18223 has 42 MA's), (15, 18310), (16, 18352), (17, 18385), (25, 18565), (28, 18625), (30, 18667), (31, 18670), (33, 18691), (40, 18769), (46, 18889), (50, 18949), (55, 19036), (60, 19108), (64, 19195),

Gene: Truckee\_3 Start: 1423, Stop: 2547, Start Num: 12

Candidate Starts for Truckee\_3:

(8, 1384), (Start: 12 @1423 has 42 MA's), (21, 1681), (32, 1885),



Gene: Trustiboi\_3 Start: 1556, Stop: 2680, Start Num: 12

Candidate Starts for Trustiboi\_3:

(Start: 12 @1556 has 42 MA's), (19, 1745), (21, 1814), (24, 1871), (32, 2018), (60, 2426), (61, 2429),

Gene: Uzumaki\_4 Start: 1520, Stop: 2500, Start Num: 12

Candidate Starts for Uzumaki\_4:

(Start: 12 @1520 has 42 MA's), (18, 1691), (32, 1991), (35, 2021), (48, 2219), (62, 2429),

Gene: Zeina\_4 Start: 1530, Stop: 2510, Start Num: 12

Candidate Starts for Zeina\_4:

(Start: 12 @1530 has 42 MA's), (18, 1701), (32, 2001), (35, 2031), (48, 2229), (62, 2439),