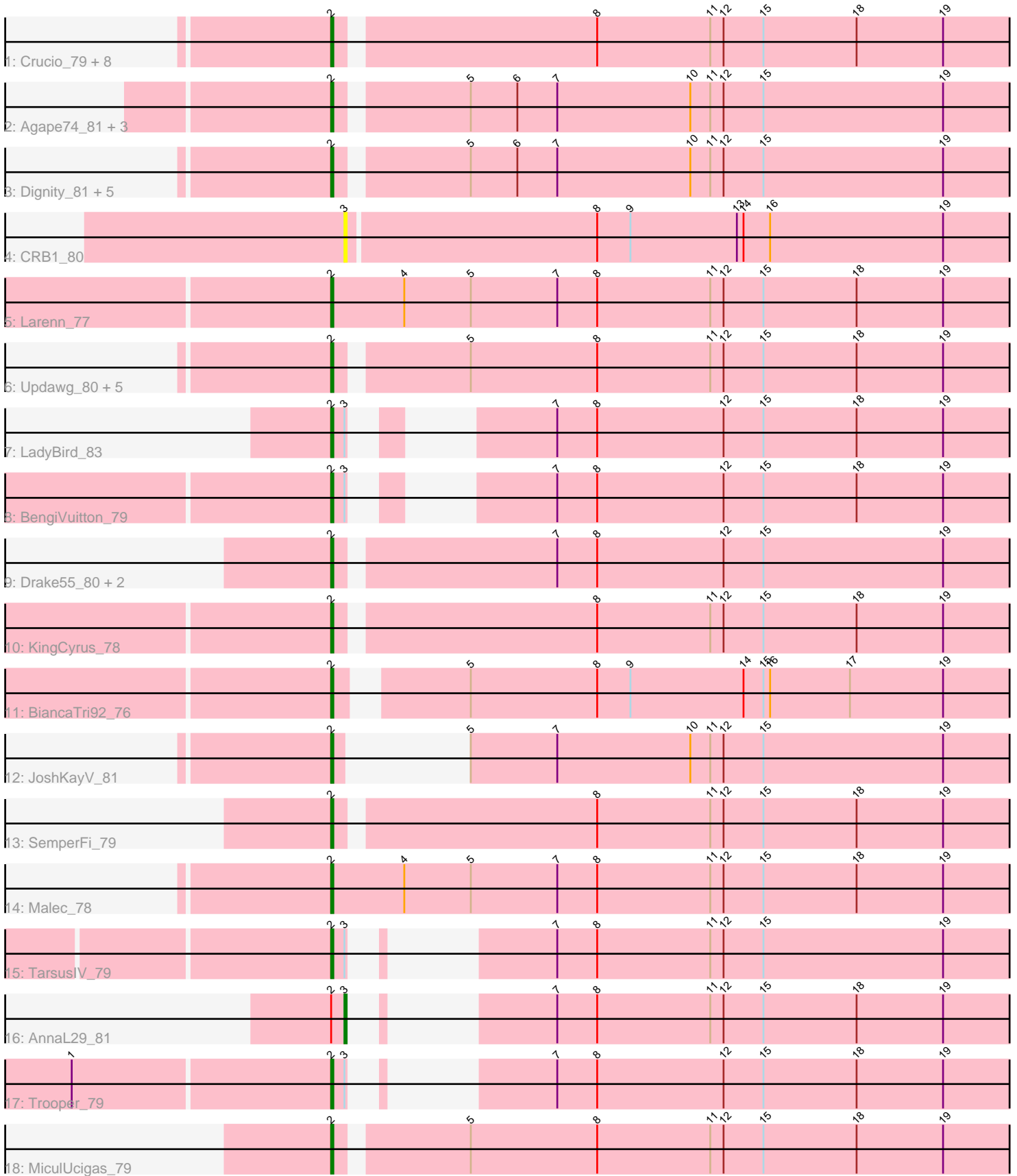


Pham 196660



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 196660 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196660 has 41 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Crucio\_79, QueenBeesly\_79, SnapTap\_79, FiringLine\_79, First\_0080, Georgie2\_81, 20ES\_81, SweetiePie\_79, Power\_79
- Track 2 : Agape74\_81, Buggy\_81, LilTurb\_80, Jerm\_81
- Track 3 : Dignity\_81, Whabigail7\_79, Smeagan\_82, Leviathan\_81, Turbido\_80, AbbyPaige\_81
- Track 4 : CRB1\_80
- Track 5 : Larenn\_77
- Track 6 : Updawg\_80, Flare16\_79, Centaur\_79, WideWale\_80, Baehexic\_78, Equemioh13\_79
- Track 7 : LadyBird\_83
- Track 8 : BengiVuitton\_79
- Track 9 : Drake55\_80, HarryHoudini\_79, Piro94\_78
- Track 10 : KingCyrus\_78
- Track 11 : BiancaTri92\_76
- Track 12 : JoshKayV\_81
- Track 13 : SemperFi\_79
- Track 14 : Malec\_78
- Track 15 : TarsusIV\_79
- Track 16 : AnnaL29\_81
- Track 17 : Trooper\_79
- Track 18 : MiculUcigas\_79

### ***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 37 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES\_81, AbbyPaige\_81, Agape74\_81, Baehexic\_78, BengiVuitton\_79, BiancaTri92\_76, Buggy\_81, Centaur\_79, Crucio\_79, Dignity\_81, Drake55\_80, Equemioh13\_79, FiringLine\_79, First\_0080, Flare16\_79, Georgie2\_81, HarryHoudini\_79, Jerm\_81, JoshKayV\_81, KingCyrus\_78, LadyBird\_83, Larenn\_77, Leviathan\_81, LilTurb\_80, Malec\_78, MiculUcigas\_79, Piro94\_78, Power\_79, QueenBeesly\_79, SemperFi\_79, Smeagan\_82, SnapTap\_79, SweetiePie\_79,

TarsusIV\_79, Trooper\_79, Turbido\_80, Updawg\_80, Whabigail7\_79, WideWale\_80,

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

- AnnaL29\_81,

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

- CRB1\_80,

### Summary by start number:

Start 2:

- Found in 40 of 41 ( 97.6% ) of genes in pham
- Manual Annotations of this start: 37 of 38
- Called 97.5% of time when present
- Phage (with cluster) where this start called: 20ES\_81 (A2), AbbyPaige\_81 (A2), Agape74\_81 (A2), Baehexic\_78 (A2), BengiVuitton\_79 (A2), BiancaTri92\_76 (A2), Buggy\_81 (A2), Centaur\_79 (A2), Crucio\_79 (A2), Dignity\_81 (A2), Drake55\_80 (A2), Equemioh13\_79 (A2), FiringLine\_79 (A2), First\_0080 (A2), Flare16\_79 (A2), Georgie2\_81 (A2), HarryHoudini\_79 (A2), Jerm\_81 (A2), JoshKayV\_81 (A2), KingCyrus\_78 (A2), LadyBird\_83 (A2), Larenn\_77 (A2), Leviathan\_81 (A2), LilTurb\_80 (A2), Malec\_78 (A2), MiculUcigas\_79 (A2), Piro94\_78 (A2), Power\_79 (A2), QueenBeesly\_79 (A2), SemperFi\_79 (A2), Smeagan\_82 (A2), SnapTap\_79 (A2), SweetiePie\_79 (A2), TarsusIV\_79 (A2), Trooper\_79 (A2), Turbido\_80 (A2), Updawg\_80 (A2), Whabigail7\_79 (A2), WideWale\_80 (A2),

Start 3:

- Found in 6 of 41 ( 14.6% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 33.3% of time when present
- Phage (with cluster) where this start called: AnnaL29\_81 (A2), CRB1\_80 (A2),

### Summary by clusters:

There is one cluster represented in this pham: A2

Info for manual annotations of cluster A2:

- Start number 2 was manually annotated 37 times for cluster A2.
- Start number 3 was manually annotated 1 time for cluster A2.

### Gene Information:

Gene: 20ES\_81 Start: 46774, Stop: 46457, Start Num: 2

Candidate Starts for 20ES\_81:

(Start: 2 @46774 has 37 MA's), (8, 46663), (11, 46612), (12, 46606), (15, 46588), (18, 46546), (19, 46507),

Gene: AbbyPaige\_81 Start: 47049, Stop: 46729, Start Num: 2

Candidate Starts for AbbyPaige\_81:

(Start: 2 @47049 has 37 MA's), (5, 46995), (6, 46974), (7, 46956), (10, 46896), (11, 46887), (12, 46881), (15, 46863), (19, 46782),

Gene: Agape74\_81 Start: 47043, Stop: 46723, Start Num: 2

Candidate Starts for Agape74\_81:

(Start: 2 @47043 has 37 MA's), (5, 46989), (6, 46968), (7, 46950), (10, 46890), (11, 46881), (12, 46875), (15, 46857), (19, 46776),

Gene: AnnaL29\_81 Start: 47245, Stop: 46979, Start Num: 3

Candidate Starts for AnnaL29\_81:

(Start: 2 @47251 has 37 MA's), (Start: 3 @47245 has 1 MA's), (7, 47206), (8, 47188), (11, 47137), (12, 47131), (15, 47113), (18, 47071), (19, 47032),

Gene: Baehexic\_78 Start: 46443, Stop: 46123, Start Num: 2

Candidate Starts for Baehexic\_78:

(Start: 2 @46443 has 37 MA's), (5, 46389), (8, 46332), (11, 46281), (12, 46275), (15, 46257), (18, 46215), (19, 46176),

Gene: BengiVuitton\_79 Start: 46581, Stop: 46300, Start Num: 2

Candidate Starts for BengiVuitton\_79:

(Start: 2 @46581 has 37 MA's), (Start: 3 @46575 has 1 MA's), (7, 46527), (8, 46509), (12, 46452), (15, 46434), (18, 46392), (19, 46353),

Gene: BiancaTri92\_76 Start: 46264, Stop: 45950, Start Num: 2

Candidate Starts for BiancaTri92\_76:

(Start: 2 @46264 has 37 MA's), (5, 46216), (8, 46159), (9, 46144), (14, 46093), (15, 46084), (16, 46081), (17, 46045), (19, 46003),

Gene: Buggy\_81 Start: 47094, Stop: 46774, Start Num: 2

Candidate Starts for Buggy\_81:

(Start: 2 @47094 has 37 MA's), (5, 47040), (6, 47019), (7, 47001), (10, 46941), (11, 46932), (12, 46926), (15, 46908), (19, 46827),

Gene: CRB1\_80 Start: 47036, Stop: 46719, Start Num: 3

Candidate Starts for CRB1\_80:

(Start: 3 @47036 has 1 MA's), (8, 46925), (9, 46910), (13, 46862), (14, 46859), (16, 46847), (19, 46769),

Gene: Centaur\_79 Start: 46321, Stop: 46001, Start Num: 2

Candidate Starts for Centaur\_79:

(Start: 2 @46321 has 37 MA's), (5, 46267), (8, 46210), (11, 46159), (12, 46153), (15, 46135), (18, 46093), (19, 46054),

Gene: Crucio\_79 Start: 46848, Stop: 46531, Start Num: 2

Candidate Starts for Crucio\_79:

(Start: 2 @46848 has 37 MA's), (8, 46737), (11, 46686), (12, 46680), (15, 46662), (18, 46620), (19, 46581),

Gene: Dignity\_81 Start: 47132, Stop: 46812, Start Num: 2

Candidate Starts for Dignity\_81:

(Start: 2 @47132 has 37 MA's), (5, 47078), (6, 47057), (7, 47039), (10, 46979), (11, 46970), (12, 46964), (15, 46946), (19, 46865),

Gene: Drake55\_80 Start: 46578, Stop: 46258, Start Num: 2

Candidate Starts for Drake55\_80:

(Start: 2 @46578 has 37 MA's), (7, 46485), (8, 46467), (12, 46410), (15, 46392), (19, 46311),

Gene: Equemioh13\_79 Start: 46550, Stop: 46230, Start Num: 2

Candidate Starts for Equemioh13\_79:

(Start: 2 @46550 has 37 MA's), (5, 46496), (8, 46439), (11, 46388), (12, 46382), (15, 46364), (18, 46322), (19, 46283),

Gene: FiringLine\_79 Start: 46830, Stop: 46513, Start Num: 2

Candidate Starts for FiringLine\_79:

(Start: 2 @46830 has 37 MA's), (8, 46719), (11, 46668), (12, 46662), (15, 46644), (18, 46602), (19, 46563),

Gene: First\_0080 Start: 46674, Stop: 46357, Start Num: 2

Candidate Starts for First\_0080:

(Start: 2 @46674 has 37 MA's), (8, 46563), (11, 46512), (12, 46506), (15, 46488), (18, 46446), (19, 46407),

Gene: Flare16\_79 Start: 46365, Stop: 46045, Start Num: 2

Candidate Starts for Flare16\_79:

(Start: 2 @46365 has 37 MA's), (5, 46311), (8, 46254), (11, 46203), (12, 46197), (15, 46179), (18, 46137), (19, 46098),

Gene: Georgie2\_81 Start: 47034, Stop: 46717, Start Num: 2

Candidate Starts for Georgie2\_81:

(Start: 2 @47034 has 37 MA's), (8, 46923), (11, 46872), (12, 46866), (15, 46848), (18, 46806), (19, 46767),

Gene: HarryHoudini\_79 Start: 46575, Stop: 46255, Start Num: 2

Candidate Starts for HarryHoudini\_79:

(Start: 2 @46575 has 37 MA's), (7, 46482), (8, 46464), (12, 46407), (15, 46389), (19, 46308),

Gene: Jerm\_81 Start: 47115, Stop: 46795, Start Num: 2

Candidate Starts for Jerm\_81:

(Start: 2 @47115 has 37 MA's), (5, 47061), (6, 47040), (7, 47022), (10, 46962), (11, 46953), (12, 46947), (15, 46929), (19, 46848),

Gene: JoshKayV\_81 Start: 47259, Stop: 46987, Start Num: 2

Candidate Starts for JoshKayV\_81:

(Start: 2 @47259 has 37 MA's), (5, 47253), (7, 47214), (10, 47154), (11, 47145), (12, 47139), (15, 47121), (19, 47040),

Gene: KingCyrus\_78 Start: 47984, Stop: 47667, Start Num: 2

Candidate Starts for KingCyrus\_78:

(Start: 2 @47984 has 37 MA's), (8, 47873), (11, 47822), (12, 47816), (15, 47798), (18, 47756), (19, 47717),

Gene: LadyBird\_83 Start: 47185, Stop: 46904, Start Num: 2

Candidate Starts for LadyBird\_83:

(Start: 2 @47185 has 37 MA's), (Start: 3 @47179 has 1 MA's), (7, 47131), (8, 47113), (12, 47056), (15, 47038), (18, 46996), (19, 46957),

Gene: Larenn\_77 Start: 46535, Stop: 46206, Start Num: 2

Candidate Starts for Larenn\_77:

(Start: 2 @46535 has 37 MA's), (4, 46502), (5, 46472), (7, 46433), (8, 46415), (11, 46364), (12, 46358), (15, 46340), (18, 46298), (19, 46259),

Gene: Leviathan\_81 Start: 47181, Stop: 46861, Start Num: 2

Candidate Starts for Leviathan\_81:

(Start: 2 @47181 has 37 MA's), (5, 47127), (6, 47106), (7, 47088), (10, 47028), (11, 47019), (12, 47013), (15, 46995), (19, 46914),

Gene: LilTurb\_80 Start: 46995, Stop: 46675, Start Num: 2

Candidate Starts for LilTurb\_80:

(Start: 2 @46995 has 37 MA's), (5, 46941), (6, 46920), (7, 46902), (10, 46842), (11, 46833), (12, 46827), (15, 46809), (19, 46728),

Gene: Malec\_78 Start: 47105, Stop: 46776, Start Num: 2

Candidate Starts for Malec\_78:

(Start: 2 @47105 has 37 MA's), (4, 47072), (5, 47042), (7, 47003), (8, 46985), (11, 46934), (12, 46928), (15, 46910), (18, 46868), (19, 46829),

Gene: MiculUcigas\_79 Start: 46268, Stop: 45948, Start Num: 2

Candidate Starts for MiculUcigas\_79:

(Start: 2 @46268 has 37 MA's), (5, 46214), (8, 46157), (11, 46106), (12, 46100), (15, 46082), (18, 46040), (19, 46001),

Gene: Piro94\_78 Start: 46509, Stop: 46189, Start Num: 2

Candidate Starts for Piro94\_78:

(Start: 2 @46509 has 37 MA's), (7, 46416), (8, 46398), (12, 46341), (15, 46323), (19, 46242),

Gene: Power\_79 Start: 47033, Stop: 46716, Start Num: 2

Candidate Starts for Power\_79:

(Start: 2 @47033 has 37 MA's), (8, 46922), (11, 46871), (12, 46865), (15, 46847), (18, 46805), (19, 46766),

Gene: QueenBeesly\_79 Start: 46830, Stop: 46513, Start Num: 2

Candidate Starts for QueenBeesly\_79:

(Start: 2 @46830 has 37 MA's), (8, 46719), (11, 46668), (12, 46662), (15, 46644), (18, 46602), (19, 46563),

Gene: SemperFi\_79 Start: 46718, Stop: 46401, Start Num: 2

Candidate Starts for SemperFi\_79:

(Start: 2 @46718 has 37 MA's), (8, 46607), (11, 46556), (12, 46550), (15, 46532), (18, 46490), (19, 46451),

Gene: Smeagan\_82 Start: 47272, Stop: 46952, Start Num: 2

Candidate Starts for Smeagan\_82:

(Start: 2 @47272 has 37 MA's), (5, 47218), (6, 47197), (7, 47179), (10, 47119), (11, 47110), (12, 47104), (15, 47086), (19, 47005),

Gene: SnapTap\_79 Start: 46689, Stop: 46372, Start Num: 2

Candidate Starts for SnapTap\_79:

(Start: 2 @46689 has 37 MA's), (8, 46578), (11, 46527), (12, 46521), (15, 46503), (18, 46461), (19, 46422),

Gene: SweetiePie\_79 Start: 46821, Stop: 46504, Start Num: 2

Candidate Starts for SweetiePie\_79:

(Start: 2 @46821 has 37 MA's), (8, 46710), (11, 46659), (12, 46653), (15, 46635), (18, 46593), (19, 46554),

Gene: TarsusIV\_79 Start: 46873, Stop: 46601, Start Num: 2

Candidate Starts for TarsusIV\_79:

(Start: 2 @46873 has 37 MA's), (Start: 3 @46867 has 1 MA's), (7, 46828), (8, 46810), (11, 46759), (12, 46753), (15, 46735), (19, 46654),

Gene: Trooper\_79 Start: 46430, Stop: 46158, Start Num: 2

Candidate Starts for Trooper\_79:

(1, 46544), (Start: 2 @46430 has 37 MA's), (Start: 3 @46424 has 1 MA's), (7, 46385), (8, 46367), (12, 46310), (15, 46292), (18, 46250), (19, 46211),

Gene: Turbido\_80 Start: 46993, Stop: 46673, Start Num: 2

Candidate Starts for Turbido\_80:

(Start: 2 @46993 has 37 MA's), (5, 46939), (6, 46918), (7, 46900), (10, 46840), (11, 46831), (12, 46825), (15, 46807), (19, 46726),

Gene: Updawg\_80 Start: 46550, Stop: 46230, Start Num: 2

Candidate Starts for Updawg\_80:

(Start: 2 @46550 has 37 MA's), (5, 46496), (8, 46439), (11, 46388), (12, 46382), (15, 46364), (18, 46322), (19, 46283),

Gene: Whabigail7\_79 Start: 46991, Stop: 46671, Start Num: 2

Candidate Starts for Whabigail7\_79:

(Start: 2 @46991 has 37 MA's), (5, 46937), (6, 46916), (7, 46898), (10, 46838), (11, 46829), (12, 46823), (15, 46805), (19, 46724),

Gene: WideWale\_80 Start: 46550, Stop: 46230, Start Num: 2

Candidate Starts for WideWale\_80:

(Start: 2 @46550 has 37 MA's), (5, 46496), (8, 46439), (11, 46388), (12, 46382), (15, 46364), (18, 46322), (19, 46283),