

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 219783 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219783 has 56 members, 4 are drafts.

Phages represented in each track:

- Track 1 : EastWest_26
- Track 2 : Beans_23
- Track 3 : Jawnski_23
- Track 4 : Brent_23, Franzy_23
- Track 5 : Piccoletto_23, NathanVaag_23
- Track 6 : King2_23
- Track 7 : Shade_25, Grekaycon_25, TaeYoung_25
- Track 8 : Pippa_25
- Track 9 : Martha_25, BossLady_25
- Track 10 : Timinator_25, BarretLemon_25, LeeroyJ_25, GravityBall_25, StevieBAY_25
- Track 11 : Zartrosa_25
- Track 12 : JKerns_25, Sonny_25, Jordan_25
- Track 13 : Sicarius2_26
- Track 14 : Wyborn_26
- Track 15 : Abba_24
- Track 16 : Nostromo_25
- Track 17 : Ranunculus_39
- Track 18 : MoyaNatalis_28, JaNo_28, Mordred_28, Tophat_28, Linus_28, JayCookie_28
- Track 19 : Kabreeze_28, Chocolat_28, Scavito_28, Conboy_28, Chipper1996_280, PrincessTrina_28, RosiePosie_28, Chubster_28, EdgarPoe_28, HumptyDumpty_28
- Track 20 : KBurrousTX_28
- Track 21 : Lymara_28
- Track 22 : Colucci_27
- Track 23 : DrYang_28
- Track 24 : Circuit_24
- Track 25 : Altadena_24
- Track 26 : CalWood4100_26, Prairie_24, Lilmac1015_26
- Track 27 : Bumble_24
- Track 28 : Bolt007_25
- Track 29 : Klevey_25

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

The start number called the most often in the published annotations is 11, it was called in 34 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_24, BarretLemon_25, Beans_23, Bolt007_25, Brent_23, CalWood4100_26, Colucci_27, DrYang_28, EastWest_26, Franzy_23, GravityBall_25, Grekaycon_25, JKerns_25, JaNo_28, Jawnski_23, JayCookie_28, Jordan_25, KBurrousTX_28, LeeroyJ_25, Lilmac1015_26, Linus_28, Lymara_28, Mordred_28, MoyaNatalis_28, NathanVaag_23, Nostromo_25, Piccoletto_23, Prairie_24, Shade_25, Sicarius2_26, Sonny_25, StevieBAY_25, TaeYoung_25, Timinator_25, Tophat_28, Wyborn_26, Zartrosa_25,

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

- BossLady_25, Chipper1996_280, Chocolat_28, Chubster_28, Conboy_28, EdgarPoe_28, HumptyDumpty_28, Kabreeze_28, King2_23, Klevey_25, Martha_25, Pippa_25, PrincessTrina_28, RosiePosie_28, Scavito_28,

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

- Altadena_24, Bumble_24, Circuit_24, Ranunculus_39,

Summary by start number:

Start 10:

- Found in 20 of 56 (35.7%) of genes in pham
- Manual Annotations of this start: 13 of 52
- Called 65.0% of time when present
- Phage (with cluster) where this start called: BossLady_25 (AO2), Chipper1996_280 (AR), Chocolat_28 (AR), Chubster_28 (AR), Conboy_28 (AR), EdgarPoe_28 (AR), HumptyDumpty_28 (AR), Kabreeze_28 (AR), Martha_25 (AO2), Pippa_25 (AO2), PrincessTrina_28 (AR), RosiePosie_28 (AR), Scavito_28 (AR),

Start 11:

- Found in 52 of 56 (92.9%) of genes in pham
- Manual Annotations of this start: 34 of 52
- Called 71.2% of time when present
- Phage (with cluster) where this start called: Abba_24 (AO3), BarretLemon_25 (AO2), Beans_23 (AO1), Bolt007_25 (FH), Brent_23 (AO1), CalWood4100_26 (FH), Colucci_27 (AR), DrYang_28 (AR), EastWest_26 (AO), Franzy_23 (AO1), GravityBall_25 (AO2), Grekaycon_25 (AO2), JKerns_25 (AO2), JaNo_28 (AR), Jawnski_23 (AO1), JayCookie_28 (AR), Jordan_25 (AO2), KBurrousTX_28 (AR), LeeroyJ_25 (AO2), Lilmac1015_26 (FH), Linus_28 (AR), Lymara_28 (AR), Mordred_28 (AR), MoyaNatalis_28 (AR), NathanVaag_23 (AO1), Nostromo_25 (AO3), Piccoletto_23 (AO1), Prairie_24 (FH), Shade_25 (AO2), Sicarius2_26 (AO2), Sonny_25 (AO2), StevieBAY_25 (AO2), TaeYoung_25 (AO2), Timinator_25 (AO2), Tophat_28 (AR), Wyborn_26 (AO2), Zartrosa_25 (AO2),

Start 12:

- Found in 5 of 56 (8.9%) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Klevey_25 (FH),

Start 13:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: King2_23 (AO1),

Start 14:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 3 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena_24 (FH), Bumble_24 (FH), Circuit_24 (FH), Ranunculus_39 (AP),

Summary by clusters:

There are 7 clusters represented in this pham: AO, AP, AR, AO3, AO2, AO1, FH,

Info for manual annotations of cluster AO:

- Start number 11 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 11 was manually annotated 6 times for cluster AO1.
- Start number 13 was manually annotated 1 time for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 10 was manually annotated 3 times for cluster AO2.
- Start number 11 was manually annotated 14 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 11 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AP:

- Start number 14 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AR:

- Start number 10 was manually annotated 10 times for cluster AR.
- Start number 11 was manually annotated 9 times for cluster AR.

Info for manual annotations of cluster FH:

- Start number 11 was manually annotated 3 times for cluster FH.
- Start number 12 was manually annotated 1 time for cluster FH.
- Start number 14 was manually annotated 2 times for cluster FH.

Gene Information:

Gene: Abba_24 Start: 22694, Stop: 22966, Start Num: 11

Candidate Starts for Abba_24:

(Start: 11 @22694 has 34 MA's), (20, 22742), (26, 22760), (30, 22778), (31, 22784), (33, 22802), (43, 22919),

Gene: Altadena_24 Start: 21892, Stop: 22152, Start Num: 14

Candidate Starts for Altadena_24:

(1, 21250), (2, 21340), (3, 21370), (5, 21526), (6, 21637), (9, 21814), (Start: 14 @21892 has 3 MA's), (17, 21907), (43, 22117),

Gene: BarretLemon_25 Start: 22825, Stop: 23112, Start Num: 11

Candidate Starts for BarretLemon_25:

(Start: 11 @22825 has 34 MA's), (18, 22861), (22, 22891), (30, 22921), (39, 23029), (41, 23050), (43, 23062),

Gene: Beans_23 Start: 22491, Stop: 22778, Start Num: 11

Candidate Starts for Beans_23:

(8, 22416), (Start: 11 @22491 has 34 MA's), (19, 22545), (37, 22671), (40, 22704), (41, 22716), (43, 22728),

Gene: Bolt007_25 Start: 20917, Stop: 21198, Start Num: 11

Candidate Starts for Bolt007_25:

(1, 20293), (2, 20383), (4, 20560), (5, 20572), (9, 20863), (Start: 11 @20917 has 34 MA's), (Start: 12 @20920 has 1 MA's), (18, 20953), (43, 21154), (45, 21163),

Gene: BossLady_25 Start: 22799, Stop: 23089, Start Num: 10

Candidate Starts for BossLady_25:

(8, 22727), (Start: 10 @22799 has 13 MA's), (Start: 11 @22802 has 34 MA's), (18, 22838), (30, 22898), (39, 23006), (40, 23015), (41, 23027), (43, 23039),

Gene: Brent_23 Start: 22473, Stop: 22760, Start Num: 11

Candidate Starts for Brent_23:

(Start: 11 @22473 has 34 MA's), (16, 22497), (37, 22653), (41, 22698), (43, 22710),

Gene: Bumble_24 Start: 21766, Stop: 22026, Start Num: 14

Candidate Starts for Bumble_24:

(Start: 14 @21766 has 3 MA's), (43, 21991),

Gene: CalWood4100_26 Start: 20907, Stop: 21188, Start Num: 11

Candidate Starts for CalWood4100_26:

(6, 20673), (9, 20853), (Start: 11 @20907 has 34 MA's), (Start: 12 @20910 has 1 MA's), (43, 21144), (45, 21153),

Gene: Chipper1996_280 Start: 25644, Stop: 25934, Start Num: 10

Candidate Starts for Chipper1996_280:

(8, 25575), (Start: 10 @25644 has 13 MA's), (Start: 11 @25647 has 34 MA's), (19, 25701), (21, 25710), (22, 25713), (23, 25716), (30, 25743), (34, 25797), (36, 25821), (38, 25842), (39, 25851), (40, 25860), (41, 25872), (43, 25884), (45, 25893),

Gene: Chocolat_28 Start: 25644, Stop: 25934, Start Num: 10

Candidate Starts for Chocolat_28:

(8, 25575), (Start: 10 @25644 has 13 MA's), (Start: 11 @25647 has 34 MA's), (19, 25701), (21, 25710), (22, 25713), (23, 25716), (30, 25743), (34, 25797), (36, 25821), (38, 25842), (39, 25851), (40, 25860), (41, 25872), (43, 25884), (45, 25893),

Gene: Chubster_28 Start: 25415, Stop: 25705, Start Num: 10

Candidate Starts for Chubster_28:

(8, 25346), (Start: 10 @25415 has 13 MA's), (Start: 11 @25418 has 34 MA's), (19, 25472), (21, 25481), (22, 25484), (23, 25487), (30, 25514), (34, 25568), (36, 25592), (38, 25613), (39, 25622), (40, 25631),

(41, 25643), (43, 25655), (45, 25664),

Gene: Circuit_24 Start: 21828, Stop: 22088, Start Num: 14

Candidate Starts for Circuit_24:

(9, 21753), (Start: 14 @21828 has 3 MA's), (20, 21876), (37, 21996), (43, 22053),

Gene: Colucci_27 Start: 25113, Stop: 25400, Start Num: 11

Candidate Starts for Colucci_27:

(8, 25041), (Start: 11 @25113 has 34 MA's), (21, 25176), (36, 25287), (39, 25317), (40, 25326), (41, 25338), (43, 25350),

Gene: Conboy_28 Start: 25643, Stop: 25933, Start Num: 10

Candidate Starts for Conboy_28:

(8, 25574), (Start: 10 @25643 has 13 MA's), (Start: 11 @25646 has 34 MA's), (19, 25700), (21, 25709), (22, 25712), (23, 25715), (30, 25742), (34, 25796), (36, 25820), (38, 25841), (39, 25850), (40, 25859), (41, 25871), (43, 25883), (45, 25892),

Gene: DrYang_28 Start: 26738, Stop: 27025, Start Num: 11

Candidate Starts for DrYang_28:

(Start: 11 @26738 has 34 MA's), (19, 26792), (21, 26801), (22, 26804), (29, 26831), (34, 26888), (36, 26912), (40, 26951), (41, 26963), (43, 26975), (46, 27017),

Gene: EastWest_26 Start: 22751, Stop: 23047, Start Num: 11

Candidate Starts for EastWest_26:

(8, 22676), (Start: 11 @22751 has 34 MA's), (16, 22775), (18, 22787), (19, 22805), (22, 22817), (30, 22847), (32, 22865), (40, 22964), (42, 22985),

Gene: EdgarPoe_28 Start: 25643, Stop: 25933, Start Num: 10

Candidate Starts for EdgarPoe_28:

(8, 25574), (Start: 10 @25643 has 13 MA's), (Start: 11 @25646 has 34 MA's), (19, 25700), (21, 25709), (22, 25712), (23, 25715), (30, 25742), (34, 25796), (36, 25820), (38, 25841), (39, 25850), (40, 25859), (41, 25871), (43, 25883), (45, 25892),

Gene: Franzy_23 Start: 22472, Stop: 22759, Start Num: 11

Candidate Starts for Franzy_23:

(Start: 11 @22472 has 34 MA's), (16, 22496), (37, 22652), (41, 22697), (43, 22709),

Gene: GravityBall_25 Start: 22824, Stop: 23111, Start Num: 11

Candidate Starts for GravityBall_25:

(Start: 11 @22824 has 34 MA's), (18, 22860), (22, 22890), (30, 22920), (39, 23028), (41, 23049), (43, 23061),

Gene: Grekaycon_25 Start: 22811, Stop: 23101, Start Num: 11

Candidate Starts for Grekaycon_25:

(Start: 11 @22811 has 34 MA's), (28, 22901), (30, 22907), (39, 23015), (43, 23048), (44, 23054),

Gene: HumptyDumpty_28 Start: 25642, Stop: 25932, Start Num: 10

Candidate Starts for HumptyDumpty_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: JKerns_25 Start: 22838, Stop: 23128, Start Num: 11

Candidate Starts for JKerns_25:

(Start: 11 @22838 has 34 MA's), (30, 22934), (39, 23042), (43, 23075), (44, 23081),

Gene: JaNo_28 Start: 25645, Stop: 25932, Start Num: 11

Candidate Starts for JaNo_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: Jawnski_23 Start: 22486, Stop: 22773, Start Num: 11

Candidate Starts for Jawnski_23:

(8, 22411), (Start: 11 @22486 has 34 MA's), (19, 22540), (37, 22666), (41, 22711), (43, 22723),

Gene: JayCookie_28 Start: 25648, Stop: 25935, Start Num: 11

Candidate Starts for JayCookie_28:

(8, 25576), (Start: 10 @25645 has 13 MA's), (Start: 11 @25648 has 34 MA's), (19, 25702), (21, 25711), (22, 25714), (23, 25717), (30, 25744), (34, 25798), (36, 25822), (38, 25843), (39, 25852), (40, 25861), (41, 25873), (43, 25885), (45, 25894),

Gene: Jordan_25 Start: 22808, Stop: 23098, Start Num: 11

Candidate Starts for Jordan_25:

(Start: 11 @22808 has 34 MA's), (30, 22904), (39, 23012), (43, 23045), (44, 23051),

Gene: KBurrousTX_28 Start: 26559, Stop: 26852, Start Num: 11

Candidate Starts for KBurrousTX_28:

(Start: 11 @26559 has 34 MA's), (18, 26595), (19, 26613), (22, 26625), (36, 26733), (40, 26772), (41, 26784), (43, 26796),

Gene: Kabreeze_28 Start: 25642, Stop: 25932, Start Num: 10

Candidate Starts for Kabreeze_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: King2_23 Start: 22491, Stop: 22778, Start Num: 13

Candidate Starts for King2_23:

(8, 22401), (Start: 11 @22476 has 34 MA's), (Start: 13 @22491 has 1 MA's), (16, 22515), (37, 22671), (41, 22716), (43, 22728),

Gene: Klevey_25 Start: 20920, Stop: 21198, Start Num: 12

Candidate Starts for Klevey_25:

(6, 20683), (9, 20863), (Start: 11 @20917 has 34 MA's), (Start: 12 @20920 has 1 MA's), (43, 21154), (45, 21163),

Gene: LeeroyJ_25 Start: 22824, Stop: 23111, Start Num: 11

Candidate Starts for LeeroyJ_25:

(Start: 11 @22824 has 34 MA's), (18, 22860), (22, 22890), (30, 22920), (39, 23028), (41, 23049), (43, 23061),

Gene: Lilmac1015_26 Start: 20907, Stop: 21188, Start Num: 11

Candidate Starts for Lilmac1015_26:

(6, 20673), (9, 20853), (Start: 11 @20907 has 34 MA's), (Start: 12 @20910 has 1 MA's), (43, 21144), (45, 21153),

Gene: Linus_28 Start: 25645, Stop: 25932, Start Num: 11

Candidate Starts for Linus_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: Lymara_28 Start: 25643, Stop: 25930, Start Num: 11

Candidate Starts for Lymara_28:

(8, 25571), (Start: 10 @25640 has 13 MA's), (Start: 11 @25643 has 34 MA's), (19, 25697), (21, 25706), (22, 25709), (23, 25712), (34, 25793), (35, 25805), (36, 25817), (38, 25838), (39, 25847), (40, 25856), (41, 25868), (43, 25880),

Gene: Martha_25 Start: 22746, Stop: 23036, Start Num: 10

Candidate Starts for Martha_25:

(8, 22674), (Start: 10 @22746 has 13 MA's), (Start: 11 @22749 has 34 MA's), (18, 22785), (30, 22845), (39, 22953), (40, 22962), (41, 22974), (43, 22986),

Gene: Mordred_28 Start: 25645, Stop: 25932, Start Num: 11

Candidate Starts for Mordred_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: MoyaNatalis_28 Start: 25648, Stop: 25935, Start Num: 11

Candidate Starts for MoyaNatalis_28:

(8, 25576), (Start: 10 @25645 has 13 MA's), (Start: 11 @25648 has 34 MA's), (19, 25702), (21, 25711), (22, 25714), (23, 25717), (30, 25744), (34, 25798), (36, 25822), (38, 25843), (39, 25852), (40, 25861), (41, 25873), (43, 25885), (45, 25894),

Gene: NathanVaag_23 Start: 22467, Stop: 22754, Start Num: 11

Candidate Starts for NathanVaag_23:

(Start: 11 @22467 has 34 MA's), (19, 22521), (37, 22647), (40, 22680), (41, 22692), (43, 22704),

Gene: Nostromo_25 Start: 22545, Stop: 22817, Start Num: 11

Candidate Starts for Nostromo_25:

(7, 22365), (9, 22494), (Start: 11 @22545 has 34 MA's), (26, 22611), (30, 22629), (31, 22635), (33, 22653), (43, 22770),

Gene: Piccoletto_23 Start: 22466, Stop: 22753, Start Num: 11

Candidate Starts for Piccoletto_23:

(Start: 11 @22466 has 34 MA's), (19, 22520), (37, 22646), (40, 22679), (41, 22691), (43, 22703),

Gene: Pippa_25 Start: 22844, Stop: 23134, Start Num: 10

Candidate Starts for Pippa_25:

(8, 22772), (Start: 10 @22844 has 13 MA's), (Start: 11 @22847 has 34 MA's), (18, 22883), (30, 22943), (40, 23060), (41, 23072), (43, 23084),

Gene: Prairie_24 Start: 20935, Stop: 21216, Start Num: 11

Candidate Starts for Prairie_24:

(6, 20701), (9, 20881), (Start: 11 @20935 has 34 MA's), (Start: 12 @20938 has 1 MA's), (43, 21172), (45, 21181),

Gene: PrincessTrina_28 Start: 25645, Stop: 25935, Start Num: 10

Candidate Starts for PrincessTrina_28:

(8, 25576), (Start: 10 @25645 has 13 MA's), (Start: 11 @25648 has 34 MA's), (19, 25702), (21, 25711), (22, 25714), (23, 25717), (30, 25744), (34, 25798), (36, 25822), (38, 25843), (39, 25852), (40, 25861), (41, 25873), (43, 25885), (45, 25894),

Gene: Ranunculus_39 Start: 36875, Stop: 37153, Start Num: 14

Candidate Starts for Ranunculus_39:

(Start: 14 @36875 has 3 MA's), (15, 36878), (24, 36935), (27, 36944), (32, 36983), (43, 37106),

Gene: RosiePosie_28 Start: 25645, Stop: 25935, Start Num: 10

Candidate Starts for RosiePosie_28:

(8, 25576), (Start: 10 @25645 has 13 MA's), (Start: 11 @25648 has 34 MA's), (19, 25702), (21, 25711), (22, 25714), (23, 25717), (30, 25744), (34, 25798), (36, 25822), (38, 25843), (39, 25852), (40, 25861), (41, 25873), (43, 25885), (45, 25894),

Gene: Scavito_28 Start: 25642, Stop: 25932, Start Num: 10

Candidate Starts for Scavito_28:

(8, 25573), (Start: 10 @25642 has 13 MA's), (Start: 11 @25645 has 34 MA's), (19, 25699), (21, 25708), (22, 25711), (23, 25714), (30, 25741), (34, 25795), (36, 25819), (38, 25840), (39, 25849), (40, 25858), (41, 25870), (43, 25882), (45, 25891),

Gene: Shade_25 Start: 22787, Stop: 23077, Start Num: 11

Candidate Starts for Shade_25:

(Start: 11 @22787 has 34 MA's), (28, 22877), (30, 22883), (39, 22991), (43, 23024), (44, 23030),

Gene: Sicarius2_26 Start: 23226, Stop: 23498, Start Num: 11

Candidate Starts for Sicarius2_26:

(Start: 11 @23226 has 34 MA's), (17, 23241), (21, 23277), (25, 23289), (30, 23310), (31, 23316), (36, 23388), (40, 23427), (42, 23448), (43, 23451),

Gene: Sonny_25 Start: 22808, Stop: 23098, Start Num: 11

Candidate Starts for Sonny_25:

(Start: 11 @22808 has 34 MA's), (30, 22904), (39, 23012), (43, 23045), (44, 23051),

Gene: StevieBAY_25 Start: 22824, Stop: 23111, Start Num: 11

Candidate Starts for StevieBAY_25:

(Start: 11 @22824 has 34 MA's), (18, 22860), (22, 22890), (30, 22920), (39, 23028), (41, 23049), (43, 23061),

Gene: TaeYoung_25 Start: 22812, Stop: 23102, Start Num: 11

Candidate Starts for TaeYoung_25:

(Start: 11 @22812 has 34 MA's), (28, 22902), (30, 22908), (39, 23016), (43, 23049), (44, 23055),

Gene: Timinator_25 Start: 22824, Stop: 23111, Start Num: 11

Candidate Starts for Timinator_25:

(Start: 11 @22824 has 34 MA's), (18, 22860), (22, 22890), (30, 22920), (39, 23028), (41, 23049), (43, 23061),

Gene: Tophat_28 Start: 25647, Stop: 25934, Start Num: 11

Candidate Starts for Tophat_28:

(8, 25575), (Start: 10 @25644 has 13 MA's), (Start: 11 @25647 has 34 MA's), (19, 25701), (21, 25710), (22, 25713), (23, 25716), (30, 25743), (34, 25797), (36, 25821), (38, 25842), (39, 25851), (40, 25860),

(41, 25872), (43, 25884), (45, 25893),

Gene: Wyborn_26 Start: 23201, Stop: 23473, Start Num: 11

Candidate Starts for Wyborn_26:

(Start: 11 @23201 has 34 MA's), (17, 23216), (22, 23255), (25, 23264), (30, 23285), (31, 23291), (36, 23363), (40, 23402), (43, 23426),

Gene: Zartrosa_25 Start: 22811, Stop: 23101, Start Num: 11

Candidate Starts for Zartrosa_25:

(Start: 11 @22811 has 34 MA's), (28, 22901), (39, 23015), (43, 23048), (44, 23054),