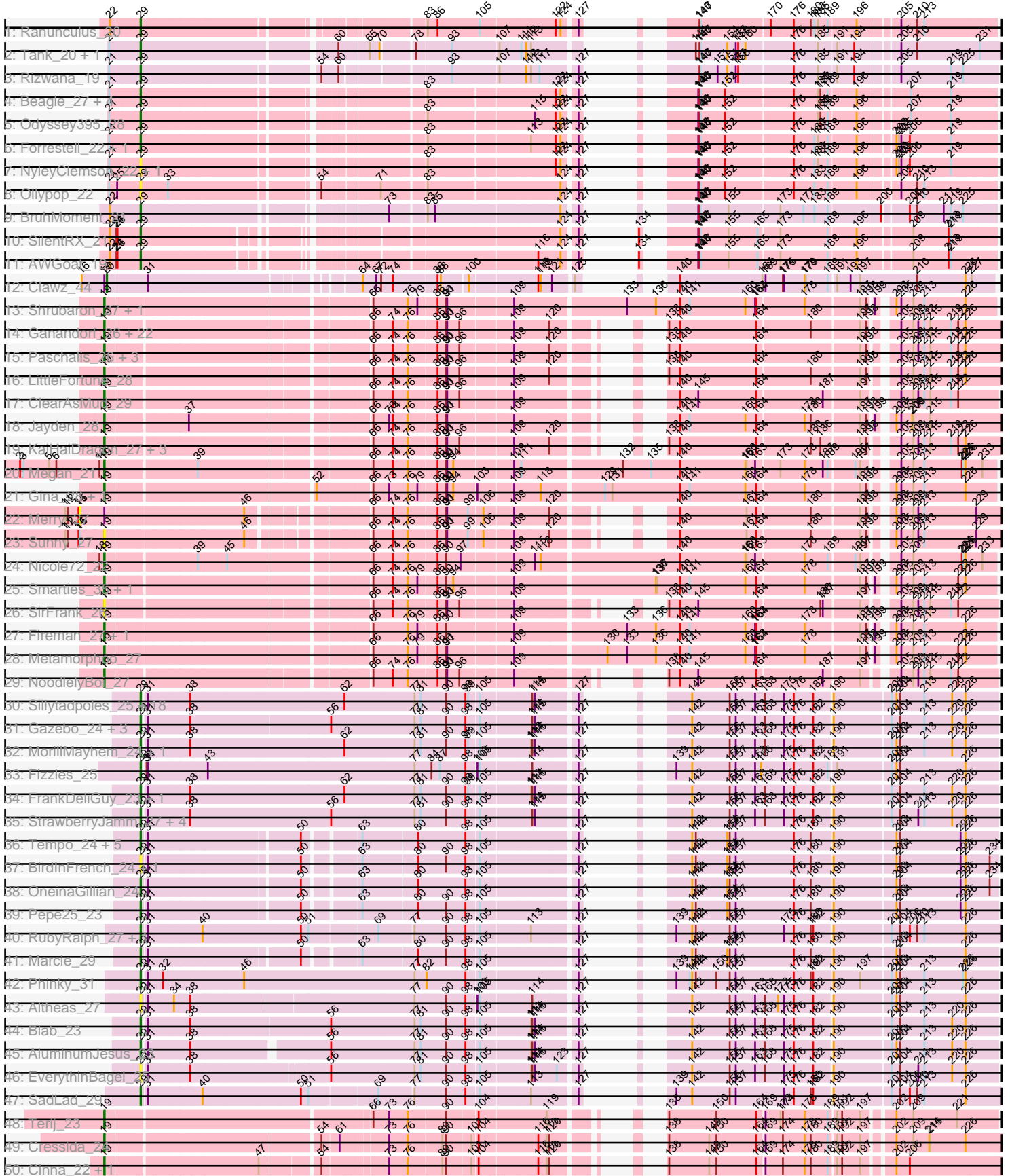
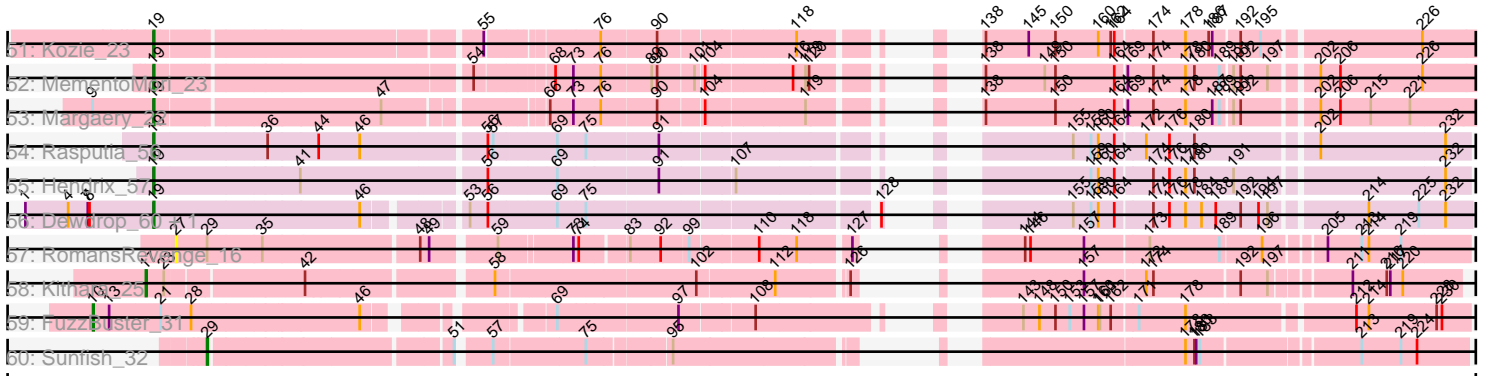


Pham 197815



Pham 197815



Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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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 197815 Report

This analysis was run 01/18/25 on database version 583.

Pham number 197815 has 135 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_20
- Track 2 : Tank_20, Wilde_20
- Track 3 : Rizwana_19
- Track 4 : Beagle_27, Pointis_26, Pureglobe5_28, Kubulix_25, DogYard_25
- Track 5 : Odyssey395_28
- Track 6 : Forrestell_22, MellowYellow_23
- Track 7 : NyleyClemson_22, RazzB_21
- Track 8 : Ollypop_22
- Track 9 : BruhMoment_21
- Track 10 : SilentRX_21
- Track 11 : AWGoat_19
- Track 12 : Clawz_44
- Track 13 : Shrubaron_27, RobsFeet_28
- Track 14 : Ganandorf_26, Quhwah_30, Busephilis_26, Jefe_27, BrazzalePHS_26, Yeti_27, Cranjis_28, Jollipop_27, PiperSansNom_27, Hermeonysus_26, Onika_26, Savannah_26, Pulchra_28, PhedwardCullen_25, Selwyn23_28, PierreOrion_27, Antares_27, Scumberland_28, Shotgun_26, CrazyRich_26, Phorgeous_26, Honeyfin_28, Piperis_27
- Track 15 : Paschalis_26, Ramiel05_26, Glorp_28, Kowalski_26
- Track 16 : LittleFortune_28
- Track 17 : ClearAsMud_29
- Track 18 : Jayden_28
- Track 19 : KaiHaiDragon_27, EarickHC_27, Phrancesco_27, Crisis_28
- Track 20 : Megan_21
- Track 21 : Gina_28, Teamocil_28
- Track 22 : Merry_27
- Track 23 : Sunny_27
- Track 24 : Nicole72_22
- Track 25 : Smarties_35, Ariadne_35
- Track 26 : SirFrank_26
- Track 27 : Fireman_27, Tyrumbra_25
- Track 28 : Metamorphoo_27
- Track 29 : NoodlelyBoi_27
- Track 30 : Sillytadpoles_25, Statler_27, Phabia_25, Zagie_25, Rowlf_21, Llemily_25, Zhafia_28, Wheelie_24, Casend_26, Jehoshaphat_27, Teehee_26, Nike_25, DonaldDuck_25, Viceroy_24, Squash_27, Lonelysoil_24, Quammi_23, Wayne3_26, Rudy_23

- Track 31 : Gazebo_24, Mashley_23, Hyperion_24, Tissue_25
- Track 32 : MorillMayhem_24, BabyDotz_24
- Track 33 : Fizzles_25
- Track 34 : FrankDeliGuy_23, Judebell_27
- Track 35 : StrawberryJamm_27, Kyva_27, Grassboy_26, Namago_25, SallyK_26
- Track 36 : Tempo_24, Kelcole_23, CandC_23, RobinRose_26, Romm_26, Fregley_25
- Track 37 : BirdInFrench_24, Wilca_24
- Track 38 : OneinaGillian_24
- Track 39 : Pepe25_23
- Track 40 : RubyRalph_27, Fransoyer_27
- Track 41 : Marcie_29
- Track 42 : Phinky_31
- Track 43 : Altheas_27
- Track 44 : Blab_23
- Track 45 : AluminumJesus_23
- Track 46 : EverythinBagel_25
- Track 47 : SadLad_29
- Track 48 : Terij_23
- Track 49 : Cressida_24
- Track 50 : Cinna_22, Matzah_23
- Track 51 : Kozie_23
- Track 52 : MementoMori_23
- Track 53 : Margaery_22
- Track 54 : Rasputia_56
- Track 55 : Hendrix_57
- Track 56 : Dewdrop_60, Leaf_60
- Track 57 : RomansRevenge_16
- Track 58 : Kithara_25
- Track 59 : FuzzBuster_31
- Track 60 : Sunfish_32

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

The start number called the most often in the published annotations is 19, it was called in 53 of the 107 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_27, Ariadne_35, BrazzalePHS_26, Busephilis_26, Cinna_22, ClearAsMud_29, Cranjis_28, CrazyRich_26, Cressida_24, Crisis_28, Dewdrop_60, EarickHC_27, Fireman_27, Ganandorf_26, Gina_28, Glorp_28, Hendrix_57, Hermeonysus_26, Honeyfin_28, Jayden_28, Jefe_27, Jollipop_27, KaiHaiDragon_27, Kowalski_26, Kozie_23, Leaf_60, LittleFortune_28, Margaery_22, Matzah_23, Megan_21, MementoMori_23, Metamorphoo_27, Nicole72_22, NoodlelyBoi_27, Onika_26, Paschalis_26, PhedwardCullen_25, Phorgeous_26, Phrancesco_27, PierreOrion_27, PiperSansNom_27, Piperis_27, Pulchra_28, Quhwah_30, Ramiel05_26, Rasputia_56, RobsFeet_28, Savannah_26, Scumberland_28, Selwyn23_28, Shotgun_26, Shrubaron_27, SirFrank_26, Smarties_35, Sunny_27, Teamocil_28, Terij_23, Tyrumbra_25, Yeti_27,

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

- Clawz_44, Merry_27,

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

- AWGoat_19, Altheas_27, AluminumJesus_23, BabyDotz_24, Beagle_27, BirdInFrench_24, Blab_23, BruhMoment_21, CandC_23, Casend_26, DogYard_25, DonaldDuck_25, EverythinBagel_25, Fizzles_25, Forrestell_22, FrankDeliGuy_23, Fransoyer_27, Fregley_25, FuzzBuster_31, Gazebo_24, Grassboy_26, Hyperion_24, Jehoshaphat_27, Judebell_27, Kelcole_23, Kithara_25, Kubulix_25, Kyva_27, Llemily_25, Lonelysoil_24, Marcie_29, Mashley_23, MellowYellow_23, MorillMayhem_24, Namago_25, Nike_25, NyleyClemson_22, Odyssey395_28, Ollypop_22, OneinaGillian_24, Pepe25_23, Phabia_25, Phinky_31, Pointis_26, Pureglobe5_28, Quammi_23, Ranunculus_20, RazzB_21, Rizwana_19, RobinRose_26, RomansRevenge_16, Romm_26, Rowlf_21, RubyRalph_27, Rudy_23, SadLad_29, SallyK_26, SilentRX_21, Sillytadpoles_25, Squash_27, Statler_27, StrawberryJamm_27, Sunfish_32, Tank_20, Teehee_26, Tempo_24, Tissue_25, Viceroy_24, Wayne3_26, Wheelie_24, Wilca_24, Wilde_20, Zagie_25, Zhafia_28,

Summary by start number:

Start 10:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 107
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FuzzBuster_31 (singleton),

Start 15:

- Found in 2 of 135 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Merry_27 (EC),

Start 17:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 107
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara_25 (singleton),

Start 19:

- Found in 61 of 135 (45.2%) of genes in pham
- Manual Annotations of this start: 53 of 107
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Antares_27 (EC), Ariadne_35 (EC), BrazzalePHS_26 (EC), Busephilis_26 (EC), Cinna_22 (EI), ClearAsMud_29 (EC), Cranjis_28 (EC), CrazyRich_26 (EC), Cressida_24 (EI), Crisis_28 (EC), Dewdrop_60 (GC), EarickHC_27 (EC), Fireman_27 (EC), Ganandorf_26 (EC), Gina_28 (EC), Glorp_28 (EC), Hendrix_57 (GC), Hermeonysus_26 (EC), Honeyfin_28 (EC), Jayden_28 (EC), Jefe_27 (EC), Jollipop_27 (EC), KaiHaiDragon_27 (EC), Kowalski_26 (EC), Kozi_23 (EI), Leaf_60 (GC), LittleFortune_28 (EC), Margaery_22 (EI), Matzah_23 (EI), Megan_21 (EC), MementoMori_23 (EI), Metamorphoo_27 (EC), Nicole72_22 (EC), NoodlelyBoi_27 (EC), Onika_26 (EC), Paschalis_26 (EC), PhedwardCullen_25 (EC), Phorgeous_26 (EC), Phrancesco_27 (EC), PierreOrion_27

(EC), PiperSansNom_27 (EC), Piperis_27 (EC), Pulchra_28 (EC), Quhwah_30 (EC), Ramiel05_26 (EC), Rasputia_56 (GC), RobsFeet_28 (EC), Savannah_26 (EC), Scumberland_28 (EC), Selwyn23_28 (EC), Shotgun_26 (EC), Shrubaron_27 (EC), SirFrank_26 (EC), Smarties_35 (EC), Sunny_27 (EC), Teamocil_28 (EC), Terij_23 (EI), Tyumbra_25 (EC), Yeti_27 (EC),

Start 20:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 107
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clawz_44 (CP),

Start 27:

- Found in 1 of 135 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_16 (singleton),

Start 29:

- Found in 72 of 135 (53.3%) of genes in pham
- Manual Annotations of this start: 51 of 107
- Called 98.6% of time when present
- Phage (with cluster) where this start called: AWGoat_19 (AP4), Altheas_27 (EG), AluminumJesus_23 (EG), BabyDotz_24 (EG), Beagle_27 (AP2), BirdInFrench_24 (EG), Blab_23 (EG), BruhMoment_21 (AP3), CandC_23 (EG), Casend_26 (EG), DogYard_25 (AP2), DonaldDuck_25 (EG), EverythinBagel_25 (EG), Fizzles_25 (EG), Forrestell_22 (AP2), FrankDeliGuy_23 (EG), Fransoyer_27 (EG), Fregley_25 (EG), Gazebo_24 (EG), Grassboy_26 (EG), Hyperion_24 (EG), Jehoshaphat_27 (EG), Judebell_27 (EG), Kelcole_23 (EG), Kubulix_25 (AP2), Kyva_27 (EG), Llemily_25 (EG), Lonelysoil_24 (EG), Marcie_29 (EG), Mashley_23 (EG), MellowYellow_23 (AP2), MorillMayhem_24 (EG), Namago_25 (EG), Nike_25 (EG), NyleyClemson_22 (AP2), Odyssey395_28 (AP2), Ollypop_22 (AP2), OneinaGillian_24 (EG), Pepe25_23 (EG), Phabia_25 (EG), Phinky_31 (EG), Pointis_26 (AP2), Pureglobe5_28 (AP2), Quammi_23 (EG), Ranunculus_20 (AP), RazzB_21 (AP2), Rizwana_19 (AP1), RobinRose_26 (EG), Romm_26 (EG), Rowlf_21 (EG), RubyRalph_27 (EG), Rudy_23 (EG), SadLad_29 (EG), SallyK_26 (EG), SilentRX_21 (AP4), Sillytadpoles_25 (EG), Squash_27 (EG), Statler_27 (EG), StrawberryJamm_27 (EG), Sunfish_32 (singleton), Tank_20 (AP1), Teehee_26 (EG), Tempo_24 (EG), Tissue_25 (EG), Viceroy_24 (EG), Wayne3_26 (EG), Wheelie_24 (EG), Wilca_24 (EG), Wilde_20 (AP1), Zagie_25 (EG), Zhafia_28 (EG),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, EI, AP2, AP3, EG, AP1, EC, AP, GC, AP4, CP,

Info for manual annotations of cluster AP:

- Start number 29 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 29 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 29 was manually annotated 5 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 29 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 29 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster CP:

- Start number 20 was manually annotated 1 time for cluster CP.

Info for manual annotations of cluster EC:

- Start number 19 was manually annotated 42 times for cluster EC.

Info for manual annotations of cluster EG:

- Start number 29 was manually annotated 38 times for cluster EG.

Info for manual annotations of cluster EI:

- Start number 19 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster GC:

- Start number 19 was manually annotated 4 times for cluster GC.

Gene Information:

Gene: AWGoat_19 Start: 13739, Stop: 15430, Start Num: 29

Candidate Starts for AWGoat_19:

(22, 13679), (24, 13691), (26, 13694), (Start: 29 @13739 has 51 MA's), (116, 14555), (124, 14609), (127, 14639), (134, 14651), (145, 14735), (146, 14738), (147, 14741), (155, 14810), (165, 14882), (173, 14930), (189, 15047), (196, 15113), (209, 15230), (218, 15317), (219, 15323),

Gene: Altheas_27 Start: 14496, Stop: 16319, Start Num: 29

Candidate Starts for Altheas_27:

(Start: 29 @14496 has 51 MA's), (31, 14508), (34, 14568), (38, 14607), (77, 15129), (90, 15204), (98, 15252), (103, 15276), (105, 15282), (114, 15399), (127, 15498), (142, 15579), (156, 15672), (157, 15687), (163, 15735), (168, 15759), (172, 15792), (175, 15807), (176, 15831), (182, 15879), (190, 15921), (201, 16056), (202, 16068), (204, 16077), (213, 16137), (226, 16239),

Gene: AluminumJesus_23 Start: 13874, Stop: 15679, Start Num: 29

Candidate Starts for AluminumJesus_23:

(Start: 29 @13874 has 51 MA's), (31, 13883), (38, 13982), (56, 14288), (77, 14489), (81, 14504), (90, 14564), (98, 14612), (105, 14642), (113, 14756), (114, 14759), (115, 14765), (127, 14858), (142, 14939), (156, 15032), (157, 15047), (163, 15095), (168, 15119), (175, 15167), (176, 15191), (182, 15239), (190, 15281), (201, 15416), (202, 15428), (204, 15437), (213, 15497), (220, 15566), (226, 15599),

Gene: Antares_27 Start: 14003, Stop: 15859, Start Num: 19

Candidate Starts for Antares_27:

(Start: 19 @14003 has 53 MA's), (66, 14579), (74, 14624), (76, 14660), (86, 14729), (90, 14750), (91, 14753), (96, 14783), (109, 14903), (120, 14984), (138, 15098), (140, 15125), (164, 15314), (180, 15440), (197, 15554), (198, 15569), (205, 15617), (209, 15647), (211, 15659), (213, 15674), (215,

15689), (219, 15740), (222, 15758), (226, 15776),

Gene: Ariadne_35 Start: 15581, Stop: 17596, Start Num: 19

Candidate Starts for Ariadne_35:

(Start: 19 @15581 has 53 MA's), (66, 16160), (74, 16205), (76, 16241), (79, 16265), (86, 16310), (90, 16331), (94, 16349), (109, 16484), (136, 16814), (137, 16817), (140, 16874), (141, 16898), (160, 17036), (164, 17063), (178, 17174), (197, 17303), (198, 17318), (199, 17327), (202, 17354), (205, 17366), (209, 17396), (213, 17423), (222, 17507), (226, 17525),

Gene: BabyDotz_24 Start: 14116, Stop: 15948, Start Num: 29

Candidate Starts for BabyDotz_24:

(Start: 29 @14116 has 51 MA's), (31, 14125), (38, 14224), (62, 14590), (77, 14758), (81, 14773), (90, 14833), (98, 14881), (99, 14887), (105, 14911), (113, 15025), (114, 15028), (115, 15034), (127, 15127), (142, 15208), (156, 15301), (157, 15316), (163, 15364), (168, 15388), (175, 15436), (176, 15460), (182, 15508), (190, 15550), (201, 15685), (202, 15697), (204, 15706), (213, 15766), (220, 15835), (226, 15868),

Gene: Beagle_27 Start: 14234, Stop: 15961, Start Num: 29

Candidate Starts for Beagle_27:

(21, 14171), (Start: 29 @14234 has 51 MA's), (83, 14843), (122, 15131), (124, 15143), (127, 15173), (145, 15269), (146, 15272), (147, 15275), (152, 15335), (176, 15497), (185, 15557), (186, 15563), (189, 15581), (196, 15644), (207, 15755), (219, 15854),

Gene: BirdInFrench_24 Start: 12993, Stop: 14771, Start Num: 29

Candidate Starts for BirdInFrench_24:

(Start: 29 @12993 has 51 MA's), (31, 13005), (50, 13350), (63, 13464), (80, 13590), (90, 13656), (98, 13704), (105, 13734), (127, 13947), (142, 14028), (144, 14037), (154, 14115), (156, 14121), (157, 14136), (176, 14280), (180, 14322), (190, 14373), (202, 14520), (204, 14529), (223, 14679), (226, 14691), (234, 14751),

Gene: Blab_23 Start: 13751, Stop: 15577, Start Num: 29

Candidate Starts for Blab_23:

(Start: 29 @13751 has 51 MA's), (31, 13760), (38, 13859), (56, 14186), (77, 14387), (81, 14402), (90, 14462), (98, 14510), (105, 14540), (113, 14654), (114, 14657), (115, 14663), (127, 14756), (142, 14837), (156, 14930), (157, 14945), (163, 14993), (168, 15017), (175, 15065), (176, 15089), (182, 15137), (190, 15179), (201, 15314), (204, 15335), (213, 15395), (220, 15464), (226, 15497),

Gene: BrazzalePHS_26 Start: 13795, Stop: 15654, Start Num: 19

Candidate Starts for BrazzalePHS_26:

(Start: 19 @13795 has 53 MA's), (66, 14374), (74, 14419), (76, 14455), (86, 14524), (90, 14545), (91, 14548), (96, 14578), (109, 14698), (120, 14779), (138, 14893), (140, 14920), (164, 15109), (180, 15235), (197, 15349), (198, 15364), (205, 15412), (209, 15442), (211, 15454), (213, 15469), (215, 15484), (219, 15535), (222, 15553), (226, 15571),

Gene: BruhMoment_21 Start: 13658, Stop: 15379, Start Num: 29

Candidate Starts for BruhMoment_21:

(22, 13598), (Start: 29 @13658 has 51 MA's), (73, 14171), (83, 14249), (85, 14264), (124, 14558), (127, 14588), (145, 14684), (146, 14687), (147, 14690), (155, 14759), (173, 14879), (177, 14936), (183, 14963), (189, 14996), (200, 15116), (206, 15170), (210, 15188), (217, 15254), (219, 15272), (225, 15302),

Gene: Busephilis_26 Start: 13734, Stop: 15590, Start Num: 19

Candidate Starts for Busephilis_26:

(Start: 19 @13734 has 53 MA's), (66, 14310), (74, 14355), (76, 14391), (86, 14460), (90, 14481), (91, 14484), (96, 14514), (109, 14634), (120, 14715), (138, 14829), (140, 14856), (164, 15045), (180, 15171), (197, 15285), (198, 15300), (205, 15348), (209, 15378), (211, 15390), (213, 15405), (215, 15420), (219, 15471), (222, 15489), (226, 15507),

Gene: CandC_23 Start: 12598, Stop: 14376, Start Num: 29

Candidate Starts for CandC_23:

(Start: 29 @12598 has 51 MA's), (31, 12610), (50, 12952), (63, 13069), (80, 13195), (98, 13309), (105, 13339), (127, 13552), (142, 13633), (144, 13642), (154, 13720), (156, 13726), (157, 13741), (176, 13885), (180, 13927), (190, 13978), (202, 14125), (204, 14134), (223, 14284), (226, 14296),

Gene: Casend_26 Start: 14462, Stop: 16294, Start Num: 29

Candidate Starts for Casend_26:

(Start: 29 @14462 has 51 MA's), (31, 14471), (38, 14570), (62, 14936), (77, 15104), (81, 15119), (90, 15179), (98, 15227), (99, 15233), (105, 15257), (114, 15374), (115, 15380), (127, 15473), (142, 15554), (156, 15647), (157, 15662), (163, 15710), (168, 15734), (175, 15782), (176, 15806), (182, 15854), (190, 15896), (201, 16031), (202, 16043), (204, 16052), (213, 16112), (220, 16181), (226, 16214),

Gene: Cinna_22 Start: 13276, Stop: 15141, Start Num: 19

Candidate Starts for Cinna_22:

(Start: 19 @13276 has 53 MA's), (47, 13630), (54, 13756), (73, 13894), (76, 13936), (89, 14017), (90, 14026), (101, 14083), (104, 14095), (116, 14227), (119, 14248), (120, 14254), (138, 14368), (149, 14467), (150, 14485), (164, 14584), (169, 14599), (174, 14641), (178, 14695), (180, 14710), (189, 14752), (191, 14767), (192, 14779), (197, 14824), (202, 14887), (206, 14920),

Gene: Clawz_44 Start: 23098, Stop: 24915, Start Num: 20

Candidate Starts for Clawz_44:

(16, 23038), (Start: 19 @23092 has 53 MA's), (Start: 20 @23098 has 1 MA's), (31, 23191), (64, 23647), (67, 23680), (72, 23692), (74, 23716), (86, 23812), (88, 23815), (100, 23872), (116, 24025), (118, 24031), (121, 24058), (125, 24100), (140, 24154), (167, 24358), (169, 24361), (174, 24403), (175, 24406), (178, 24457), (179, 24460), (189, 24514), (191, 24529), (193, 24562), (197, 24586), (210, 24727), (226, 24847), (227, 24859),

Gene: ClearAsMud_29 Start: 14527, Stop: 16377, Start Num: 19

Candidate Starts for ClearAsMud_29:

(Start: 19 @14527 has 53 MA's), (66, 15103), (74, 15148), (76, 15184), (86, 15253), (90, 15274), (91, 15277), (96, 15307), (109, 15427), (140, 15649), (145, 15694), (164, 15838), (187, 15994), (197, 16078), (205, 16141), (209, 16171), (211, 16183), (213, 16198), (215, 16213), (219, 16264), (222, 16282),

Gene: Cranjis_28 Start: 13958, Stop: 15814, Start Num: 19

Candidate Starts for Cranjis_28:

(Start: 19 @13958 has 53 MA's), (66, 14534), (74, 14579), (76, 14615), (86, 14684), (90, 14705), (91, 14708), (96, 14738), (109, 14858), (120, 14939), (138, 15053), (140, 15080), (164, 15269), (180, 15395), (197, 15509), (198, 15524), (205, 15572), (209, 15602), (211, 15614), (213, 15629), (215, 15644), (219, 15695), (222, 15713), (226, 15731),

Gene: CrazyRich_26 Start: 13768, Stop: 15624, Start Num: 19

Candidate Starts for CrazyRich_26:

(Start: 19 @13768 has 53 MA's), (66, 14344), (74, 14389), (76, 14425), (86, 14494), (90, 14515), (91, 14518), (96, 14548), (109, 14668), (120, 14749), (138, 14863), (140, 14890), (164, 15079), (180, 15205), (197, 15319), (198, 15334), (205, 15382), (209, 15412), (211, 15424), (213, 15439), (215,

15454), (219, 15505), (222, 15523), (226, 15541),

Gene: Cressida_24 Start: 13311, Stop: 15185, Start Num: 19

Candidate Starts for Cressida_24:

(Start: 19 @13311 has 53 MA's), (54, 13797), (61, 13836), (73, 13935), (76, 13977), (89, 14058), (90, 14067), (101, 14124), (104, 14136), (116, 14268), (119, 14289), (120, 14295), (138, 14409), (149, 14508), (150, 14526), (164, 14625), (169, 14640), (174, 14682), (178, 14736), (180, 14751), (189, 14793), (191, 14808), (192, 14820), (197, 14865), (202, 14928), (209, 14970), (214, 15009), (215, 15012), (226, 15099),

Gene: Crisis_28 Start: 13753, Stop: 15609, Start Num: 19

Candidate Starts for Crisis_28:

(Start: 19 @13753 has 53 MA's), (66, 14329), (74, 14374), (76, 14410), (86, 14479), (90, 14500), (91, 14503), (96, 14533), (109, 14653), (120, 14734), (138, 14848), (140, 14875), (164, 15064), (180, 15190), (186, 15214), (197, 15304), (198, 15319), (205, 15367), (209, 15397), (211, 15409), (213, 15424), (215, 15439), (219, 15490), (222, 15508), (226, 15526),

Gene: Dewdrop_60 Start: 29654, Stop: 31561, Start Num: 19

Candidate Starts for Dewdrop_60:

(1, 29438), (4, 29510), (7, 29543), (8, 29546), (Start: 19 @29654 has 53 MA's), (46, 29993), (53, 30131), (56, 30161), (69, 30269), (75, 30314), (128, 30755), (155, 30929), (159, 30959), (160, 30971), (164, 30998), (174, 31055), (176, 31082), (178, 31109), (184, 31136), (188, 31160), (192, 31202), (194, 31232), (197, 31247), (214, 31391), (225, 31475), (232, 31517),

Gene: DogYard_25 Start: 14304, Stop: 16031, Start Num: 29

Candidate Starts for DogYard_25:

(21, 14241), (Start: 29 @14304 has 51 MA's), (83, 14913), (122, 15201), (124, 15213), (127, 15243), (145, 15339), (146, 15342), (147, 15345), (152, 15405), (176, 15567), (185, 15627), (186, 15633), (189, 15651), (196, 15714), (207, 15825), (219, 15924),

Gene: DonaldDuck_25 Start: 13808, Stop: 15640, Start Num: 29

Candidate Starts for DonaldDuck_25:

(Start: 29 @13808 has 51 MA's), (31, 13817), (38, 13916), (62, 14282), (77, 14450), (81, 14465), (90, 14525), (98, 14573), (99, 14579), (105, 14603), (114, 14720), (115, 14726), (127, 14819), (142, 14900), (156, 14993), (157, 15008), (163, 15056), (168, 15080), (175, 15128), (176, 15152), (182, 15200), (190, 15242), (201, 15377), (202, 15389), (204, 15398), (213, 15458), (220, 15527), (226, 15560),

Gene: EarickHC_27 Start: 13679, Stop: 15535, Start Num: 19

Candidate Starts for EarickHC_27:

(Start: 19 @13679 has 53 MA's), (66, 14255), (74, 14300), (76, 14336), (86, 14405), (90, 14426), (91, 14429), (96, 14459), (109, 14579), (120, 14660), (138, 14774), (140, 14801), (164, 14990), (180, 15116), (186, 15140), (197, 15230), (198, 15245), (205, 15293), (209, 15323), (211, 15335), (213, 15350), (215, 15365), (219, 15416), (222, 15434), (226, 15452),

Gene: EverythinBagel_25 Start: 14211, Stop: 16028, Start Num: 29

Candidate Starts for EverythinBagel_25:

(Start: 29 @14211 has 51 MA's), (31, 14220), (38, 14319), (56, 14637), (77, 14838), (81, 14853), (90, 14913), (98, 14961), (105, 14991), (113, 15105), (114, 15108), (115, 15114), (123, 15168), (127, 15207), (142, 15288), (156, 15381), (157, 15396), (163, 15444), (168, 15468), (175, 15516), (176, 15540), (182, 15588), (190, 15630), (201, 15765), (204, 15786), (211, 15831), (213, 15846), (220, 15915), (226, 15948),

Gene: Fireman_27 Start: 13483, Stop: 15504, Start Num: 19

Candidate Starts for Fireman_27:

(Start: 19 @13483 has 53 MA's), (66, 14068), (76, 14149), (79, 14173), (86, 14218), (90, 14239), (109, 14392), (133, 14650), (136, 14722), (140, 14782), (141, 14806), (160, 14944), (163, 14968), (164, 14971), (178, 15082), (197, 15211), (198, 15226), (199, 15235), (202, 15262), (205, 15274), (209, 15304), (213, 15331), (226, 15433),

Gene: Fizzles_25 Start: 13768, Stop: 15600, Start Num: 29

Candidate Starts for Fizzles_25:

(Start: 29 @13768 has 51 MA's), (30, 13774), (31, 13777), (43, 13915), (77, 14410), (84, 14449), (87, 14470), (98, 14533), (103, 14557), (105, 14563), (114, 14680), (127, 14779), (139, 14821), (142, 14860), (156, 14953), (157, 14968), (163, 15016), (166, 15031), (175, 15088), (176, 15112), (182, 15160), (189, 15196), (191, 15211), (201, 15337), (202, 15349), (204, 15358), (226, 15520),

Gene: Forrestell_22 Start: 12942, Stop: 14669, Start Num: 29

Candidate Starts for Forrestell_22:

(21, 12879), (Start: 29 @12942 has 51 MA's), (83, 13551), (113, 13779), (122, 13839), (124, 13851), (127, 13881), (145, 13977), (146, 13980), (147, 13983), (152, 14043), (176, 14205), (183, 14256), (185, 14265), (189, 14289), (196, 14352), (202, 14427), (203, 14433), (205, 14439), (206, 14460), (219, 14562),

Gene: FrankDeliGuy_23 Start: 13770, Stop: 15602, Start Num: 29

Candidate Starts for FrankDeliGuy_23:

(Start: 29 @13770 has 51 MA's), (31, 13779), (38, 13878), (62, 14244), (77, 14412), (81, 14427), (90, 14487), (98, 14535), (99, 14541), (105, 14565), (113, 14679), (114, 14682), (115, 14688), (127, 14781), (142, 14862), (156, 14955), (157, 14970), (163, 15018), (168, 15042), (175, 15090), (176, 15114), (182, 15162), (190, 15204), (201, 15339), (204, 15360), (213, 15420), (220, 15489), (226, 15522),

Gene: Fransoyer_27 Start: 13833, Stop: 15662, Start Num: 29

Candidate Starts for Fransoyer_27:

(Start: 29 @13833 has 51 MA's), (31, 13845), (40, 13974), (50, 14202), (51, 14220), (69, 14379), (77, 14463), (90, 14541), (98, 14589), (105, 14619), (113, 14733), (127, 14835), (139, 14877), (142, 14916), (144, 14925), (156, 15009), (157, 15024), (175, 15144), (176, 15168), (180, 15210), (182, 15216), (190, 15258), (201, 15393), (204, 15414), (206, 15438), (210, 15456), (213, 15474), (226, 15576),

Gene: Fregley_25 Start: 13171, Stop: 14949, Start Num: 29

Candidate Starts for Fregley_25:

(Start: 29 @13171 has 51 MA's), (31, 13183), (50, 13525), (63, 13642), (80, 13768), (98, 13882), (105, 13912), (127, 14125), (142, 14206), (144, 14215), (154, 14293), (156, 14299), (157, 14314), (176, 14458), (180, 14500), (190, 14551), (202, 14698), (204, 14707), (223, 14857), (226, 14869),

Gene: FuzzBuster_31 Start: 13864, Stop: 15825, Start Num: 10

Candidate Starts for FuzzBuster_31:

(Start: 10 @13864 has 1 MA's), (13, 13891), (21, 13975), (28, 14026), (46, 14296), (69, 14533), (97, 14728), (108, 14842), (143, 15121), (148, 15148), (150, 15175), (153, 15199), (157, 15223), (160, 15247), (161, 15250), (162, 15268), (171, 15307), (178, 15385), (212, 15637), (214, 15658), (228, 15769), (230, 15778),

Gene: Ganandorf_26 Start: 13815, Stop: 15671, Start Num: 19

Candidate Starts for Ganandorf_26:

(Start: 19 @13815 has 53 MA's), (66, 14391), (74, 14436), (76, 14472), (86, 14541), (90, 14562), (91, 14565), (96, 14595), (109, 14715), (120, 14796), (138, 14910), (140, 14937), (164, 15126), (180, 15252), (197, 15366), (198, 15381), (205, 15429), (209, 15459), (211, 15471), (213, 15486), (215, 15501), (219, 15552), (222, 15570), (226, 15588),

Gene: Gazebo_24 Start: 14317, Stop: 16143, Start Num: 29

Candidate Starts for Gazebo_24:

(Start: 29 @14317 has 51 MA's), (31, 14326), (38, 14425), (56, 14752), (77, 14953), (81, 14968), (90, 15028), (98, 15076), (105, 15106), (114, 15223), (115, 15229), (127, 15322), (142, 15403), (156, 15496), (157, 15511), (163, 15559), (168, 15583), (175, 15631), (176, 15655), (182, 15703), (190, 15745), (201, 15880), (204, 15901), (213, 15961), (220, 16030), (226, 16063),

Gene: Gina_28 Start: 13149, Stop: 15167, Start Num: 19

Candidate Starts for Gina_28:

(Start: 19 @13149 has 53 MA's), (52, 13617), (66, 13731), (73, 13770), (76, 13812), (79, 13836), (86, 13881), (90, 13902), (91, 13905), (94, 13920), (103, 13974), (109, 14055), (118, 14115), (129, 14259), (131, 14277), (140, 14445), (141, 14469), (160, 14607), (164, 14634), (178, 14745), (197, 14874), (198, 14889), (202, 14925), (205, 14937), (209, 14967), (213, 14994), (226, 15096),

Gene: Glorp_28 Start: 13816, Stop: 15672, Start Num: 19

Candidate Starts for Glorp_28:

(Start: 19 @13816 has 53 MA's), (66, 14392), (74, 14437), (76, 14473), (86, 14542), (90, 14563), (91, 14566), (96, 14596), (109, 14716), (120, 14797), (138, 14911), (140, 14938), (164, 15127), (197, 15367), (198, 15382), (205, 15430), (209, 15460), (211, 15472), (213, 15487), (215, 15502), (219, 15553), (222, 15571), (226, 15589),

Gene: Grassboy_26 Start: 14484, Stop: 16316, Start Num: 29

Candidate Starts for Grassboy_26:

(Start: 29 @14484 has 51 MA's), (31, 14493), (38, 14592), (56, 14925), (77, 15126), (81, 15141), (90, 15201), (98, 15249), (105, 15279), (114, 15396), (115, 15402), (127, 15495), (142, 15576), (156, 15669), (157, 15684), (163, 15732), (168, 15756), (175, 15804), (176, 15828), (182, 15876), (190, 15918), (201, 16053), (204, 16074), (211, 16119), (213, 16134), (220, 16203), (226, 16236),

Gene: Hendrix_57 Start: 29698, Stop: 31632, Start Num: 19

Candidate Starts for Hendrix_57:

(Start: 19 @29698 has 53 MA's), (41, 29935), (56, 30232), (69, 30343), (91, 30505), (107, 30619), (159, 31033), (160, 31045), (164, 31072), (174, 31129), (176, 31156), (178, 31183), (180, 31198), (191, 31264), (232, 31591),

Gene: Hermeonysus_26 Start: 13684, Stop: 15543, Start Num: 19

Candidate Starts for Hermeonysus_26:

(Start: 19 @13684 has 53 MA's), (66, 14263), (74, 14308), (76, 14344), (86, 14413), (90, 14434), (91, 14437), (96, 14467), (109, 14587), (120, 14668), (138, 14782), (140, 14809), (164, 14998), (180, 15124), (197, 15238), (198, 15253), (205, 15301), (209, 15331), (211, 15343), (213, 15358), (215, 15373), (219, 15424), (222, 15442), (226, 15460),

Gene: Honeyfin_28 Start: 14000, Stop: 15859, Start Num: 19

Candidate Starts for Honeyfin_28:

(Start: 19 @14000 has 53 MA's), (66, 14579), (74, 14624), (76, 14660), (86, 14729), (90, 14750), (91, 14753), (96, 14783), (109, 14903), (120, 14984), (138, 15098), (140, 15125), (164, 15314), (180, 15440), (197, 15554), (198, 15569), (205, 15617), (209, 15647), (211, 15659), (213, 15674), (215, 15689), (219, 15740), (222, 15758), (226, 15776),

Gene: Hyperion_24 Start: 14277, Stop: 16103, Start Num: 29

Candidate Starts for Hyperion_24:

(Start: 29 @14277 has 51 MA's), (31, 14286), (38, 14385), (56, 14712), (77, 14913), (81, 14928), (90, 14988), (98, 15036), (105, 15066), (114, 15183), (115, 15189), (127, 15282), (142, 15363), (156, 15456), (157, 15471), (163, 15519), (168, 15543), (175, 15591), (176, 15615), (182, 15663), (190, 15705), (201, 15840), (204, 15861), (213, 15921), (220, 15990), (226, 16023),

Gene: Jayden_28 Start: 13519, Stop: 15375, Start Num: 19

Candidate Starts for Jayden_28:

(Start: 19 @13519 has 53 MA's), (37, 13699), (66, 14092), (73, 14131), (74, 14137), (76, 14173), (86, 14242), (90, 14263), (91, 14266), (109, 14416), (140, 14638), (141, 14662), (160, 14800), (164, 14827), (178, 14938), (180, 14953), (197, 15067), (198, 15082), (199, 15091), (202, 15118), (205, 15130), (208, 15157), (209, 15160), (215, 15202),

Gene: Jefe_27 Start: 13737, Stop: 15596, Start Num: 19

Candidate Starts for Jefe_27:

(Start: 19 @13737 has 53 MA's), (66, 14316), (74, 14361), (76, 14397), (86, 14466), (90, 14487), (91, 14490), (96, 14520), (109, 14640), (120, 14721), (138, 14835), (140, 14862), (164, 15051), (180, 15177), (197, 15291), (198, 15306), (205, 15354), (209, 15384), (211, 15396), (213, 15411), (215, 15426), (219, 15477), (222, 15495), (226, 15513),

Gene: Jehoshaphat_27 Start: 14727, Stop: 16559, Start Num: 29

Candidate Starts for Jehoshaphat_27:

(Start: 29 @14727 has 51 MA's), (31, 14736), (38, 14835), (62, 15201), (77, 15369), (81, 15384), (90, 15444), (98, 15492), (99, 15498), (105, 15522), (114, 15639), (115, 15645), (127, 15738), (142, 15819), (156, 15912), (157, 15927), (163, 15975), (168, 15999), (175, 16047), (176, 16071), (182, 16119), (190, 16161), (201, 16296), (202, 16308), (204, 16317), (213, 16377), (220, 16446), (226, 16479),

Gene: Jollipop_27 Start: 14085, Stop: 15941, Start Num: 19

Candidate Starts for Jollipop_27:

(Start: 19 @14085 has 53 MA's), (66, 14661), (74, 14706), (76, 14742), (86, 14811), (90, 14832), (91, 14835), (96, 14865), (109, 14985), (120, 15066), (138, 15180), (140, 15207), (164, 15396), (180, 15522), (197, 15636), (198, 15651), (205, 15699), (209, 15729), (211, 15741), (213, 15756), (215, 15771), (219, 15822), (222, 15840), (226, 15858),

Gene: Judebell_27 Start: 14268, Stop: 16100, Start Num: 29

Candidate Starts for Judebell_27:

(Start: 29 @14268 has 51 MA's), (31, 14277), (38, 14376), (62, 14742), (77, 14910), (81, 14925), (90, 14985), (98, 15033), (99, 15039), (105, 15063), (113, 15177), (114, 15180), (115, 15186), (127, 15279), (142, 15360), (156, 15453), (157, 15468), (163, 15516), (168, 15540), (175, 15588), (176, 15612), (182, 15660), (190, 15702), (201, 15837), (204, 15858), (213, 15918), (220, 15987), (226, 16020),

Gene: KaiHaiDragon_27 Start: 13679, Stop: 15535, Start Num: 19

Candidate Starts for KaiHaiDragon_27:

(Start: 19 @13679 has 53 MA's), (66, 14255), (74, 14300), (76, 14336), (86, 14405), (90, 14426), (91, 14429), (96, 14459), (109, 14579), (120, 14660), (138, 14774), (140, 14801), (164, 14990), (180, 15116), (186, 15140), (197, 15230), (198, 15245), (205, 15293), (209, 15323), (211, 15335), (213, 15350), (215, 15365), (219, 15416), (222, 15434), (226, 15452),

Gene: Kelcole_23 Start: 13023, Stop: 14801, Start Num: 29

Candidate Starts for Kelcole_23:

(Start: 29 @13023 has 51 MA's), (31, 13035), (50, 13377), (63, 13494), (80, 13620), (98, 13734), (105, 13764), (127, 13977), (142, 14058), (144, 14067), (154, 14145), (156, 14151), (157, 14166), (176, 14310), (180, 14352), (190, 14403), (202, 14550), (204, 14559), (223, 14709), (226, 14721),

Gene: Kithara_25 Start: 14593, Stop: 16431, Start Num: 17

Candidate Starts for Kithara_25:

(Start: 17 @14593 has 1 MA's), (23, 14623), (42, 14836), (58, 15118), (102, 15439), (112, 15559), (126, 15661), (157, 15850), (172, 15946), (174, 15958), (192, 16096), (197, 16141), (211, 16249), (216, 16306), (217, 16312), (220, 16333),

Gene: Kowalski_26 Start: 13795, Stop: 15651, Start Num: 19

Candidate Starts for Kowalski_26:

(Start: 19 @13795 has 53 MA's), (66, 14371), (74, 14416), (76, 14452), (86, 14521), (90, 14542), (91, 14545), (96, 14575), (109, 14695), (120, 14776), (138, 14890), (140, 14917), (164, 15106), (197, 15346), (198, 15361), (205, 15409), (209, 15439), (211, 15451), (213, 15466), (215, 15481), (219, 15532), (222, 15550), (226, 15568),

Gene: Kozi_23 Start: 13272, Stop: 15131, Start Num: 19

Candidate Starts for Kozi_23:

(Start: 19 @13272 has 53 MA's), (55, 13767), (76, 13923), (90, 14013), (118, 14220), (138, 14355), (145, 14427), (150, 14472), (160, 14544), (162, 14565), (164, 14571), (174, 14628), (178, 14682), (186, 14721), (187, 14727), (192, 14766), (195, 14799), (226, 15045),

Gene: Kubulix_25 Start: 14427, Stop: 16154, Start Num: 29

Candidate Starts for Kubulix_25:

(21, 14364), (Start: 29 @14427 has 51 MA's), (83, 15036), (122, 15324), (124, 15336), (127, 15366), (145, 15462), (146, 15465), (147, 15468), (152, 15528), (176, 15690), (185, 15750), (186, 15756), (189, 15774), (196, 15837), (207, 15948), (219, 16047),

Gene: Kyva_27 Start: 14519, Stop: 16351, Start Num: 29

Candidate Starts for Kyva_27:

(Start: 29 @14519 has 51 MA's), (31, 14528), (38, 14627), (56, 14960), (77, 15161), (81, 15176), (90, 15236), (98, 15284), (105, 15314), (114, 15431), (115, 15437), (127, 15530), (142, 15611), (156, 15704), (157, 15719), (163, 15767), (168, 15791), (175, 15839), (176, 15863), (182, 15911), (190, 15953), (201, 16088), (204, 16109), (211, 16154), (213, 16169), (220, 16238), (226, 16271),

Gene: Leaf_60 Start: 29654, Stop: 31561, Start Num: 19

Candidate Starts for Leaf_60:

(1, 29438), (4, 29510), (7, 29543), (8, 29546), (Start: 19 @29654 has 53 MA's), (46, 29993), (53, 30131), (56, 30161), (69, 30269), (75, 30314), (128, 30755), (155, 30929), (159, 30959), (160, 30971), (164, 30998), (174, 31055), (176, 31082), (178, 31109), (184, 31136), (188, 31160), (192, 31202), (194, 31232), (197, 31247), (214, 31391), (225, 31475), (232, 31517),

Gene: LittleFortune_28 Start: 14042, Stop: 15901, Start Num: 19

Candidate Starts for LittleFortune_28:

(Start: 19 @14042 has 53 MA's), (66, 14621), (74, 14666), (76, 14702), (86, 14771), (90, 14792), (91, 14795), (96, 14825), (109, 14945), (120, 15026), (138, 15140), (140, 15167), (164, 15356), (180, 15482), (197, 15596), (198, 15611), (205, 15659), (209, 15689), (213, 15716), (215, 15731), (219, 15782), (222, 15800), (226, 15818),

Gene: Llemily_25 Start: 13503, Stop: 15335, Start Num: 29

Candidate Starts for Llemily_25:

(Start: 29 @13503 has 51 MA's), (31, 13512), (38, 13611), (62, 13977), (77, 14145), (81, 14160), (90, 14220), (98, 14268), (99, 14274), (105, 14298), (114, 14415), (115, 14421), (127, 14514), (142, 14595), (156, 14688), (157, 14703), (163, 14751), (168, 14775), (175, 14823), (176, 14847), (182, 14895), (190, 14937), (201, 15072), (202, 15084), (204, 15093), (213, 15153), (220, 15222), (226, 15255),

Gene: Lonelysoil_24 Start: 13748, Stop: 15580, Start Num: 29

Candidate Starts for Lonelysoil_24:

(Start: 29 @13748 has 51 MA's), (31, 13757), (38, 13856), (62, 14222), (77, 14390), (81, 14405), (90, 14465), (98, 14513), (99, 14519), (105, 14543), (114, 14660), (115, 14666), (127, 14759), (142, 14840), (156, 14933), (157, 14948), (163, 14996), (168, 15020), (175, 15068), (176, 15092), (182, 15140), (190, 15182), (201, 15317), (202, 15329), (204, 15338), (213, 15398), (220, 15467), (226, 15500),

Gene: Marcie_29 Start: 13698, Stop: 15482, Start Num: 29

Candidate Starts for Marcie_29:

(Start: 29 @13698 has 51 MA's), (31, 13710), (50, 14058), (63, 14175), (80, 14301), (90, 14367), (98, 14415), (105, 14445), (127, 14658), (142, 14739), (144, 14748), (154, 14826), (156, 14832), (157, 14847), (176, 14991), (180, 15033), (190, 15084), (202, 15231), (204, 15240), (226, 15402),

Gene: Margaery_22 Start: 13234, Stop: 15096, Start Num: 19

Candidate Starts for Margaery_22:

(9, 13135), (Start: 19 @13234 has 53 MA's), (47, 13588), (66, 13807), (73, 13846), (76, 13888), (90, 13978), (104, 14047), (119, 14200), (138, 14320), (150, 14437), (164, 14536), (169, 14551), (174, 14593), (178, 14647), (187, 14692), (189, 14704), (191, 14719), (192, 14731), (202, 14839), (206, 14872), (215, 14923), (221, 14989),

Gene: Mashley_23 Start: 14088, Stop: 15914, Start Num: 29

Candidate Starts for Mashley_23:

(Start: 29 @14088 has 51 MA's), (31, 14097), (38, 14196), (56, 14523), (77, 14724), (81, 14739), (90, 14799), (98, 14847), (105, 14877), (114, 14994), (115, 15000), (127, 15093), (142, 15174), (156, 15267), (157, 15282), (163, 15330), (168, 15354), (175, 15402), (176, 15426), (182, 15474), (190, 15516), (201, 15651), (204, 15672), (213, 15732), (220, 15801), (226, 15834),

Gene: Matzah_23 Start: 13253, Stop: 15118, Start Num: 19

Candidate Starts for Matzah_23:

(Start: 19 @13253 has 53 MA's), (47, 13607), (54, 13733), (73, 13871), (76, 13913), (89, 13994), (90, 14003), (101, 14060), (104, 14072), (116, 14204), (119, 14225), (120, 14231), (138, 14345), (149, 14444), (150, 14462), (164, 14561), (169, 14576), (174, 14618), (178, 14672), (180, 14687), (189, 14729), (191, 14744), (192, 14756), (197, 14801), (202, 14864), (206, 14897),

Gene: Megan_21 Start: 14855, Stop: 16870, Start Num: 19

Candidate Starts for Megan_21:

(2, 14651), (3, 14660), (5, 14723), (6, 14741), (18, 14843), (Start: 19 @14855 has 53 MA's), (39, 15056), (66, 15434), (74, 15479), (76, 15515), (86, 15584), (90, 15605), (91, 15608), (94, 15623), (109, 15758), (111, 15773), (132, 16007), (135, 16076), (140, 16148), (160, 16310), (161, 16313), (163, 16334), (173, 16388), (178, 16448), (187, 16493), (189, 16505), (195, 16565), (197, 16577), (205, 16640), (209, 16670), (213, 16697), (224, 16790), (225, 16793), (226, 16799), (233, 16838),

Gene: MellowYellow_23 Start: 12969, Stop: 14696, Start Num: 29

Candidate Starts for MellowYellow_23:

(21, 12906), (Start: 29 @12969 has 51 MA's), (83, 13578), (113, 13806), (122, 13866), (124, 13878), (127, 13908), (145, 14004), (146, 14007), (147, 14010), (152, 14070), (176, 14232), (183, 14283),

(185, 14292), (189, 14316), (196, 14379), (202, 14454), (203, 14460), (205, 14466), (206, 14487), (219, 14589),

Gene: MementoMori_23 Start: 12969, Stop: 14840, Start Num: 19

Candidate Starts for MementoMori_23:

(Start: 19 @12969 has 53 MA's), (54, 13452), (68, 13560), (73, 13590), (76, 13632), (89, 13713), (90, 13722), (101, 13779), (104, 13791), (116, 13923), (119, 13944), (120, 13950), (138, 14064), (149, 14163), (150, 14181), (164, 14280), (169, 14295), (174, 14337), (178, 14391), (180, 14406), (189, 14448), (191, 14463), (192, 14475), (197, 14520), (202, 14583), (206, 14616), (226, 14754),

Gene: Merry_27 Start: 13998, Stop: 15890, Start Num: 15

Candidate Starts for Merry_27:

(11, 13962), (12, 13968), (14, 13995), (15, 13998), (Start: 19 @14052 has 53 MA's), (46, 14373), (66, 14610), (74, 14655), (76, 14691), (86, 14760), (90, 14781), (91, 14784), (99, 14835), (106, 14868), (109, 14934), (120, 15015), (140, 15156), (161, 15321), (164, 15345), (180, 15471), (197, 15585), (198, 15600), (202, 15636), (205, 15648), (209, 15678), (211, 15690), (213, 15705), (229, 15831),

Gene: Metamorphoo_27 Start: 13469, Stop: 15490, Start Num: 19

Candidate Starts for Metamorphoo_27:

(Start: 19 @13469 has 53 MA's), (66, 14054), (76, 14135), (79, 14159), (86, 14204), (90, 14225), (91, 14228), (109, 14378), (130, 14588), (133, 14636), (136, 14708), (140, 14768), (141, 14792), (160, 14930), (163, 14954), (164, 14957), (178, 15068), (197, 15197), (198, 15212), (199, 15221), (202, 15248), (205, 15260), (209, 15290), (213, 15317), (222, 15401), (226, 15419),

Gene: MorillMayhem_24 Start: 14081, Stop: 15913, Start Num: 29

Candidate Starts for MorillMayhem_24:

(Start: 29 @14081 has 51 MA's), (31, 14090), (38, 14189), (62, 14555), (77, 14723), (81, 14738), (90, 14798), (98, 14846), (99, 14852), (105, 14876), (113, 14990), (114, 14993), (115, 14999), (127, 15092), (142, 15173), (156, 15266), (157, 15281), (163, 15329), (168, 15353), (175, 15401), (176, 15425), (182, 15473), (190, 15515), (201, 15650), (202, 15662), (204, 15671), (213, 15731), (220, 15800), (226, 15833),

Gene: Namago_25 Start: 13649, Stop: 15481, Start Num: 29

Candidate Starts for Namago_25:

(Start: 29 @13649 has 51 MA's), (31, 13658), (38, 13757), (56, 14090), (77, 14291), (81, 14306), (90, 14366), (98, 14414), (105, 14444), (114, 14561), (115, 14567), (127, 14660), (142, 14741), (156, 14834), (157, 14849), (163, 14897), (168, 14921), (175, 14969), (176, 14993), (182, 15041), (190, 15083), (201, 15218), (204, 15239), (211, 15284), (213, 15299), (220, 15368), (226, 15401),

Gene: Nicole72_22 Start: 15232, Stop: 17253, Start Num: 19

Candidate Starts for Nicole72_22:

(18, 15220), (Start: 19 @15232 has 53 MA's), (39, 15433), (45, 15505), (66, 15817), (74, 15862), (76, 15898), (86, 15967), (90, 15988), (97, 16024), (109, 16141), (115, 16186), (118, 16201), (140, 16531), (160, 16693), (161, 16696), (163, 16717), (178, 16831), (189, 16888), (195, 16948), (197, 16960), (205, 17023), (209, 17053), (224, 17173), (225, 17176), (226, 17182), (233, 17221),

Gene: Nike_25 Start: 14547, Stop: 16379, Start Num: 29

Candidate Starts for Nike_25:

(Start: 29 @14547 has 51 MA's), (31, 14556), (38, 14655), (62, 15021), (77, 15189), (81, 15204), (90, 15264), (98, 15312), (99, 15318), (105, 15342), (114, 15459), (115, 15465), (127, 15558), (142, 15639), (156, 15732), (157, 15747), (163, 15795), (168, 15819), (175, 15867), (176, 15891), (182, 15939), (190, 15981), (201, 16116), (202, 16128), (204, 16137), (213, 16197), (220, 16266), (226, 16299),

Gene: NoodlelyBoi_27 Start: 14134, Stop: 15984, Start Num: 19

Candidate Starts for NoodlelyBoi_27:

(Start: 19 @14134 has 53 MA's), (66, 14710), (74, 14755), (76, 14791), (86, 14860), (90, 14881), (91, 14884), (96, 14914), (109, 15034), (138, 15229), (140, 15256), (145, 15301), (164, 15445), (187, 15601), (197, 15685), (205, 15748), (209, 15778), (211, 15790), (213, 15805), (215, 15820), (219, 15871), (222, 15889),

Gene: NyleyClemson_22 Start: 12914, Stop: 14641, Start Num: 29

Candidate Starts for NyleyClemson_22:

(21, 12851), (Start: 29 @12914 has 51 MA's), (83, 13523), (122, 13811), (124, 13823), (127, 13853), (145, 13949), (146, 13952), (147, 13955), (152, 14015), (176, 14177), (183, 14228), (185, 14237), (189, 14261), (196, 14324), (202, 14399), (203, 14405), (205, 14411), (206, 14432), (219, 14534),

Gene: Odyssey395_28 Start: 14429, Stop: 16156, Start Num: 29

Candidate Starts for Odyssey395_28:

(21, 14366), (Start: 29 @14429 has 51 MA's), (83, 15038), (115, 15275), (122, 15326), (124, 15338), (127, 15368), (145, 15464), (146, 15467), (147, 15470), (152, 15530), (176, 15692), (185, 15752), (186, 15758), (189, 15776), (196, 15839), (207, 15950), (219, 16049),

Gene: Ollypop_22 Start: 13443, Stop: 15170, Start Num: 29

Candidate Starts for Ollypop_22:

(21, 13380), (25, 13395), (Start: 29 @13443 has 51 MA's), (33, 13509), (54, 13833), (71, 13953), (83, 14049), (124, 14352), (127, 14382), (145, 14478), (146, 14481), (147, 14484), (152, 14544), (176, 14706), (183, 14757), (189, 14790), (196, 14853), (205, 14940), (210, 14979), (213, 14997),

Gene: OneinaGillian_24 Start: 12673, Stop: 14451, Start Num: 29

Candidate Starts for OneinaGillian_24:

(Start: 29 @12673 has 51 MA's), (31, 12685), (50, 13027), (63, 13144), (80, 13270), (98, 13384), (105, 13414), (127, 13627), (142, 13708), (144, 13717), (154, 13795), (156, 13801), (157, 13816), (176, 13960), (180, 14002), (190, 14053), (202, 14200), (204, 14209), (223, 14359), (226, 14371), (234, 14431),

Gene: Onika_26 Start: 13769, Stop: 15625, Start Num: 19

Candidate Starts for Onika_26:

(Start: 19 @13769 has 53 MA's), (66, 14345), (74, 14390), (76, 14426), (86, 14495), (90, 14516), (91, 14519), (96, 14549), (109, 14669), (120, 14750), (138, 14864), (140, 14891), (164, 15080), (180, 15206), (197, 15320), (198, 15335), (205, 15383), (209, 15413), (211, 15425), (213, 15440), (215, 15455), (219, 15506), (222, 15524), (226, 15542),

Gene: Paschalis_26 Start: 13783, Stop: 15639, Start Num: 19

Candidate Starts for Paschalis_26:

(Start: 19 @13783 has 53 MA's), (66, 14359), (74, 14404), (76, 14440), (86, 14509), (90, 14530), (91, 14533), (96, 14563), (109, 14683), (120, 14764), (138, 14878), (140, 14905), (164, 15094), (197, 15334), (198, 15349), (205, 15397), (209, 15427), (211, 15439), (213, 15454), (215, 15469), (219, 15520), (222, 15538), (226, 15556),

Gene: Pepe25_23 Start: 13010, Stop: 14788, Start Num: 29

Candidate Starts for Pepe25_23:

(Start: 29 @13010 has 51 MA's), (31, 13022), (50, 13367), (63, 13481), (80, 13607), (90, 13673), (98, 13721), (105, 13751), (127, 13964), (142, 14045), (144, 14054), (154, 14132), (156, 14138), (157, 14153), (176, 14297), (180, 14339), (190, 14390), (202, 14537), (204, 14546), (223, 14696), (226, 14708),

Gene: Phabia_25 Start: 13921, Stop: 15753, Start Num: 29

Candidate Starts for Phabia_25:

(Start: 29 @13921 has 51 MA's), (31, 13930), (38, 14029), (62, 14395), (77, 14563), (81, 14578), (90, 14638), (98, 14686), (99, 14692), (105, 14716), (114, 14833), (115, 14839), (127, 14932), (142, 15013), (156, 15106), (157, 15121), (163, 15169), (168, 15193), (175, 15241), (176, 15265), (182, 15313), (190, 15355), (201, 15490), (202, 15502), (204, 15511), (213, 15571), (220, 15640), (226, 15673),

Gene: PhedwardCullen_25 Start: 13528, Stop: 15384, Start Num: 19

Candidate Starts for PhedwardCullen_25:

(Start: 19 @13528 has 53 MA's), (66, 14104), (74, 14149), (76, 14185), (86, 14254), (90, 14275), (91, 14278), (96, 14308), (109, 14428), (120, 14509), (138, 14623), (140, 14650), (164, 14839), (180, 14965), (197, 15079), (198, 15094), (205, 15142), (209, 15172), (211, 15184), (213, 15199), (215, 15214), (219, 15265), (222, 15283), (226, 15301),

Gene: Phinky_31 Start: 14788, Stop: 16635, Start Num: 29

Candidate Starts for Phinky_31:

(Start: 29 @14788 has 51 MA's), (31, 14797), (32, 14833), (46, 15022), (77, 15442), (82, 15469), (98, 15565), (105, 15595), (127, 15811), (139, 15853), (141, 15886), (142, 15892), (144, 15901), (150, 15952), (156, 15985), (157, 16000), (176, 16144), (180, 16186), (182, 16192), (190, 16237), (197, 16303), (201, 16372), (202, 16384), (204, 16393), (213, 16453), (225, 16549), (226, 16555),

Gene: Phorgeous_26 Start: 13636, Stop: 15492, Start Num: 19

Candidate Starts for Phorgeous_26:

(Start: 19 @13636 has 53 MA's), (66, 14212), (74, 14257), (76, 14293), (86, 14362), (90, 14383), (91, 14386), (96, 14416), (109, 14536), (120, 14617), (138, 14731), (140, 14758), (164, 14947), (180, 15073), (197, 15187), (198, 15202), (205, 15250), (209, 15280), (211, 15292), (213, 15307), (215, 15322), (219, 15373), (222, 15391), (226, 15409),

Gene: Phrancesco_27 Start: 13914, Stop: 15770, Start Num: 19

Candidate Starts for Phrancesco_27:

(Start: 19 @13914 has 53 MA's), (66, 14490), (74, 14535), (76, 14571), (86, 14640), (90, 14661), (91, 14664), (96, 14694), (109, 14814), (120, 14895), (138, 15009), (140, 15036), (164, 15225), (180, 15351), (186, 15375), (197, 15465), (198, 15480), (205, 15528), (209, 15558), (211, 15570), (213, 15585), (215, 15600), (219, 15651), (222, 15669), (226, 15687),

Gene: PierreOrion_27 Start: 13938, Stop: 15794, Start Num: 19

Candidate Starts for PierreOrion_27:

(Start: 19 @13938 has 53 MA's), (66, 14514), (74, 14559), (76, 14595), (86, 14664), (90, 14685), (91, 14688), (96, 14718), (109, 14838), (120, 14919), (138, 15033), (140, 15060), (164, 15249), (180, 15375), (197, 15489), (198, 15504), (205, 15552), (209, 15582), (211, 15594), (213, 15609), (215, 15624), (219, 15675), (222, 15693), (226, 15711),

Gene: PiperSansNom_27 Start: 14090, Stop: 15946, Start Num: 19

Candidate Starts for PiperSansNom_27:

(Start: 19 @14090 has 53 MA's), (66, 14666), (74, 14711), (76, 14747), (86, 14816), (90, 14837), (91, 14840), (96, 14870), (109, 14990), (120, 15071), (138, 15185), (140, 15212), (164, 15401), (180, 15527), (197, 15641), (198, 15656), (205, 15704), (209, 15734), (211, 15746), (213, 15761), (215, 15776), (219, 15827), (222, 15845), (226, 15863),

Gene: Piperis_27 Start: 13760, Stop: 15616, Start Num: 19

Candidate Starts for Piperis_27:

(Start: 19 @13760 has 53 MA's), (66, 14336), (74, 14381), (76, 14417), (86, 14486), (90, 14507), (91, 14510), (96, 14540), (109, 14660), (120, 14741), (138, 14855), (140, 14882), (164, 15071), (180, 15197), (197, 15311), (198, 15326), (205, 15374), (209, 15404), (211, 15416), (213, 15431), (215, 15446), (219, 15497), (222, 15515), (226, 15533),

Gene: Pointis_26 Start: 14433, Stop: 16160, Start Num: 29

Candidate Starts for Pointis_26:

(21, 14370), (Start: 29 @14433 has 51 MA's), (83, 15042), (122, 15330), (124, 15342), (127, 15372), (145, 15468), (146, 15471), (147, 15474), (152, 15534), (176, 15696), (185, 15756), (186, 15762), (189, 15780), (196, 15843), (207, 15954), (219, 16053),

Gene: Pulchra_28 Start: 14160, Stop: 16016, Start Num: 19

Candidate Starts for Pulchra_28:

(Start: 19 @14160 has 53 MA's), (66, 14736), (74, 14781), (76, 14817), (86, 14886), (90, 14907), (91, 14910), (96, 14940), (109, 15060), (120, 15141), (138, 15255), (140, 15282), (164, 15471), (180, 15597), (197, 15711), (198, 15726), (205, 15774), (209, 15804), (211, 15816), (213, 15831), (215, 15846), (219, 15897), (222, 15915), (226, 15933),

Gene: Pureglobe5_28 Start: 14443, Stop: 16170, Start Num: 29

Candidate Starts for Pureglobe5_28:

(21, 14380), (Start: 29 @14443 has 51 MA's), (83, 15052), (122, 15340), (124, 15352), (127, 15382), (145, 15478), (146, 15481), (147, 15484), (152, 15544), (176, 15706), (185, 15766), (186, 15772), (189, 15790), (196, 15853), (207, 15964), (219, 16063),

Gene: Quammi_23 Start: 13492, Stop: 15324, Start Num: 29

Candidate Starts for Quammi_23:

(Start: 29 @13492 has 51 MA's), (31, 13501), (38, 13600), (62, 13966), (77, 14134), (81, 14149), (90, 14209), (98, 14257), (99, 14263), (105, 14287), (114, 14404), (115, 14410), (127, 14503), (142, 14584), (156, 14677), (157, 14692), (163, 14740), (168, 14764), (175, 14812), (176, 14836), (182, 14884), (190, 14926), (201, 15061), (202, 15073), (204, 15082), (213, 15142), (220, 15211), (226, 15244),

Gene: Quhwah_30 Start: 14383, Stop: 16242, Start Num: 19

Candidate Starts for Quhwah_30:

(Start: 19 @14383 has 53 MA's), (66, 14962), (74, 15007), (76, 15043), (86, 15112), (90, 15133), (91, 15136), (96, 15166), (109, 15286), (120, 15367), (138, 15481), (140, 15508), (164, 15697), (180, 15823), (197, 15937), (198, 15952), (205, 16000), (209, 16030), (211, 16042), (213, 16057), (215, 16072), (219, 16123), (222, 16141), (226, 16159),

Gene: Ramiel05_26 Start: 13795, Stop: 15651, Start Num: 19

Candidate Starts for Ramiel05_26:

(Start: 19 @13795 has 53 MA's), (66, 14371), (74, 14416), (76, 14452), (86, 14521), (90, 14542), (91, 14545), (96, 14575), (109, 14695), (120, 14776), (138, 14890), (140, 14917), (164, 15106), (197, 15346), (198, 15361), (205, 15409), (209, 15439), (211, 15451), (213, 15466), (215, 15481), (219, 15532), (222, 15550), (226, 15568),

Gene: Ranunculus_20 Start: 13327, Stop: 15048, Start Num: 29

Candidate Starts for Ranunculus_20:

(22, 13264), (Start: 29 @13327 has 51 MA's), (83, 13921), (86, 13942), (105, 14044), (122, 14218), (124, 14230), (127, 14260), (146, 14359), (147, 14362), (170, 14527), (176, 14584), (180, 14626), (183, 14635), (185, 14644), (189, 14668), (196, 14731), (205, 14818), (210, 14857), (213, 14875),

Gene: Rasputia_56 Start: 29361, Stop: 31292, Start Num: 19

Candidate Starts for Rasputia_56:

(Start: 19 @29361 has 53 MA's), (36, 29544), (44, 29628), (46, 29697), (56, 29895), (57, 29904), (69, 30003), (75, 30048), (91, 30165), (155, 30663), (159, 30693), (160, 30705), (164, 30732), (172, 30777), (176, 30816), (180, 30858), (202, 31044), (232, 31251),

Gene: RazzB_21 Start: 12742, Stop: 14469, Start Num: 29

Candidate Starts for RazzB_21:

(21, 12679), (Start: 29 @12742 has 51 MA's), (83, 13351), (122, 13639), (124, 13651), (127, 13681), (145, 13777), (146, 13780), (147, 13783), (152, 13843), (176, 14005), (183, 14056), (185, 14065), (189, 14089), (196, 14152), (202, 14227), (203, 14233), (205, 14239), (206, 14260), (219, 14362),

Gene: Rizwana_19 Start: 13218, Stop: 14954, Start Num: 29

Candidate Starts for Rizwana_19:

(21, 13155), (Start: 29 @13218 has 51 MA's), (54, 13608), (60, 13644), (93, 13878), (107, 13986), (112, 14049), (113, 14058), (117, 14079), (127, 14160), (146, 14259), (147, 14262), (151, 14304), (154, 14328), (157, 14349), (158, 14355), (176, 14484), (185, 14544), (191, 14583), (194, 14625), (205, 14718), (219, 14841), (225, 14871),

Gene: RobinRose_26 Start: 13174, Stop: 14952, Start Num: 29

Candidate Starts for RobinRose_26:

(Start: 29 @13174 has 51 MA's), (31, 13186), (50, 13528), (63, 13645), (80, 13771), (98, 13885), (105, 13915), (127, 14128), (142, 14209), (144, 14218), (154, 14296), (156, 14302), (157, 14317), (176, 14461), (180, 14503), (190, 14554), (202, 14701), (204, 14710), (223, 14860), (226, 14872),

Gene: RobsFeet_28 Start: 13750, Stop: 15771, Start Num: 19

Candidate Starts for RobsFeet_28:

(Start: 19 @13750 has 53 MA's), (66, 14335), (76, 14416), (79, 14440), (86, 14485), (90, 14506), (91, 14509), (109, 14659), (133, 14917), (136, 14989), (140, 15049), (141, 15073), (160, 15211), (163, 15235), (164, 15238), (178, 15349), (197, 15478), (198, 15493), (199, 15502), (202, 15529), (205, 15541), (209, 15571), (213, 15598), (226, 15700),

Gene: RomansRevenge_16 Start: 11444, Stop: 13249, Start Num: 27

Candidate Starts for RomansRevenge_16:

(27, 11444), (Start: 29 @11492 has 51 MA's), (35, 11582), (48, 11834), (49, 11849), (59, 11942), (73, 12053), (74, 12062), (83, 12131), (92, 12176), (99, 12218), (110, 12323), (118, 12380), (127, 12458), (144, 12548), (146, 12557), (157, 12647), (173, 12749), (189, 12866), (196, 12929), (205, 13013), (213, 13070), (214, 13082), (219, 13136),

Gene: Romm_26 Start: 13174, Stop: 14952, Start Num: 29

Candidate Starts for Romm_26:

(Start: 29 @13174 has 51 MA's), (31, 13186), (50, 13528), (63, 13645), (80, 13771), (98, 13885), (105, 13915), (127, 14128), (142, 14209), (144, 14218), (154, 14296), (156, 14302), (157, 14317), (176, 14461), (180, 14503), (190, 14554), (202, 14701), (204, 14710), (223, 14860), (226, 14872),

Gene: Rowlf_21 Start: 13250, Stop: 15082, Start Num: 29

Candidate Starts for Rowlf_21:

(Start: 29 @13250 has 51 MA's), (31, 13259), (38, 13358), (62, 13724), (77, 13892), (81, 13907), (90, 13967), (98, 14015), (99, 14021), (105, 14045), (114, 14162), (115, 14168), (127, 14261), (142, 14342), (156, 14435), (157, 14450), (163, 14498), (168, 14522), (175, 14570), (176, 14594), (182, 14642), (190, 14684), (201, 14819), (202, 14831), (204, 14840), (213, 14900), (220, 14969), (226, 15002),

Gene: RubyRalph_27 Start: 13767, Stop: 15596, Start Num: 29

Candidate Starts for RubyRalph_27:

(Start: 29 @13767 has 51 MA's), (31, 13779), (40, 13908), (50, 14136), (51, 14154), (69, 14313), (77, 14397), (90, 14475), (98, 14523), (105, 14553), (113, 14667), (127, 14769), (139, 14811), (142, 14850), (144, 14859), (156, 14943), (157, 14958), (175, 15078), (176, 15102), (180, 15144), (182, 15150), (190, 15192), (201, 15327), (204, 15348), (206, 15372), (210, 15390), (213, 15408), (226, 15510),

Gene: Rudy_23 Start: 13492, Stop: 15324, Start Num: 29

Candidate Starts for Rudy_23:

(Start: 29 @13492 has 51 MA's), (31, 13501), (38, 13600), (62, 13966), (77, 14134), (81, 14149), (90, 14209), (98, 14257), (99, 14263), (105, 14287), (114, 14404), (115, 14410), (127, 14503), (142, 14584), (156, 14677), (157, 14692), (163, 14740), (168, 14764), (175, 14812), (176, 14836), (182, 14884), (190, 14926), (201, 15061), (202, 15073), (204, 15082), (213, 15142), (220, 15211), (226, 15244),

Gene: SadLad_29 Start: 14704, Stop: 16533, Start Num: 29

Candidate Starts for SadLad_29:

(Start: 29 @14704 has 51 MA's), (31, 14716), (40, 14845), (50, 15073), (51, 15091), (69, 15250), (77, 15334), (90, 15412), (98, 15460), (105, 15490), (113, 15604), (127, 15706), (139, 15748), (142, 15787), (156, 15880), (157, 15895), (175, 16015), (176, 16039), (180, 16081), (182, 16087), (190, 16129), (201, 16264), (204, 16285), (206, 16309), (210, 16327), (213, 16345), (226, 16447),

Gene: SallyK_26 Start: 14644, Stop: 16470, Start Num: 29

Candidate Starts for SallyK_26:

(Start: 29 @14644 has 51 MA's), (31, 14653), (38, 14752), (56, 15079), (77, 15280), (81, 15295), (90, 15355), (98, 15403), (105, 15433), (114, 15550), (115, 15556), (127, 15649), (142, 15730), (156, 15823), (157, 15838), (163, 15886), (168, 15910), (175, 15958), (176, 15982), (182, 16030), (190, 16072), (201, 16207), (204, 16228), (211, 16273), (213, 16288), (220, 16357), (226, 16390),

Gene: Savannah_26 Start: 13819, Stop: 15678, Start Num: 19

Candidate Starts for Savannah_26:

(Start: 19 @13819 has 53 MA's), (66, 14398), (74, 14443), (76, 14479), (86, 14548), (90, 14569), (91, 14572), (96, 14602), (109, 14722), (120, 14803), (138, 14917), (140, 14944), (164, 15133), (180, 15259), (197, 15373), (198, 15388), (205, 15436), (209, 15466), (211, 15478), (213, 15493), (215, 15508), (219, 15559), (222, 15577), (226, 15595),

Gene: Scumberland_28 Start: 14010, Stop: 15866, Start Num: 19

Candidate Starts for Scumberland_28:

(Start: 19 @14010 has 53 MA's), (66, 14586), (74, 14631), (76, 14667), (86, 14736), (90, 14757), (91, 14760), (96, 14790), (109, 14910), (120, 14991), (138, 15105), (140, 15132), (164, 15321), (180, 15447), (197, 15561), (198, 15576), (205, 15624), (209, 15654), (211, 15666), (213, 15681), (215, 15696), (219, 15747), (222, 15765), (226, 15783),

Gene: Selwyn23_28 Start: 13988, Stop: 15844, Start Num: 19

Candidate Starts for Selwyn23_28:

(Start: 19 @13988 has 53 MA's), (66, 14564), (74, 14609), (76, 14645), (86, 14714), (90, 14735), (91, 14738), (96, 14768), (109, 14888), (120, 14969), (138, 15083), (140, 15110), (164, 15299), (180, 15425), (197, 15539), (198, 15554), (205, 15602), (209, 15632), (211, 15644), (213, 15659), (215, 15674), (219, 15725), (222, 15743), (226, 15761),

Gene: Shotgun_26 Start: 13617, Stop: 15476, Start Num: 19

Candidate Starts for Shotgun_26:

(Start: 19 @13617 has 53 MA's), (66, 14196), (74, 14241), (76, 14277), (86, 14346), (90, 14367), (91, 14370), (96, 14400), (109, 14520), (120, 14601), (138, 14715), (140, 14742), (164, 14931), (180, 15057), (197, 15171), (198, 15186), (205, 15234), (209, 15264), (211, 15276), (213, 15291), (215, 15306), (219, 15357), (222, 15375), (226, 15393),

Gene: Shrubaron_27 Start: 13384, Stop: 15405, Start Num: 19

Candidate Starts for Shrubaron_27:

(Start: 19 @13384 has 53 MA's), (66, 13969), (76, 14050), (79, 14074), (86, 14119), (90, 14140), (91, 14143), (109, 14293), (133, 14551), (136, 14623), (140, 14683), (141, 14707), (160, 14845), (163, 14869), (164, 14872), (178, 14983), (197, 15112), (198, 15127), (199, 15136), (202, 15163), (205, 15175), (209, 15205), (213, 15232), (226, 15334),

Gene: SilentRX_21 Start: 13505, Stop: 15193, Start Num: 29

Candidate Starts for SilentRX_21:

(22, 13445), (24, 13457), (26, 13460), (Start: 29 @13505 has 51 MA's), (124, 14372), (127, 14402), (134, 14414), (145, 14498), (146, 14501), (147, 14504), (155, 14573), (165, 14645), (173, 14693), (189, 14810), (196, 14876), (209, 14993), (218, 15080), (219, 15086),

Gene: Sillytadpoles_25 Start: 13490, Stop: 15322, Start Num: 29

Candidate Starts for Sillytadpoles_25:

(Start: 29 @13490 has 51 MA's), (31, 13499), (38, 13598), (62, 13964), (77, 14132), (81, 14147), (90, 14207), (98, 14255), (99, 14261), (105, 14285), (114, 14402), (115, 14408), (127, 14501), (142, 14582), (156, 14675), (157, 14690), (163, 14738), (168, 14762), (175, 14810), (176, 14834), (182, 14882), (190, 14924), (201, 15059), (202, 15071), (204, 15080), (213, 15140), (220, 15209), (226, 15242),

Gene: SirFrank_26 Start: 13737, Stop: 15587, Start Num: 19

Candidate Starts for SirFrank_26:

(Start: 19 @13737 has 53 MA's), (66, 14313), (74, 14358), (76, 14394), (86, 14463), (90, 14484), (91, 14487), (96, 14517), (109, 14637), (138, 14832), (140, 14859), (145, 14904), (164, 15048), (186, 15198), (187, 15204), (197, 15288), (205, 15351), (209, 15381), (211, 15393), (213, 15408), (215, 15423), (219, 15474), (222, 15492),

Gene: Smarties_35 Start: 15581, Stop: 17596, Start Num: 19

Candidate Starts for Smarties_35:

(Start: 19 @15581 has 53 MA's), (66, 16160), (74, 16205), (76, 16241), (79, 16265), (86, 16310), (90, 16331), (94, 16349), (109, 16484), (136, 16814), (137, 16817), (140, 16874), (141, 16898), (160, 17036), (164, 17063), (178, 17174), (197, 17303), (198, 17318), (199, 17327), (202, 17354), (205, 17366), (209, 17396), (213, 17423), (222, 17507), (226, 17525),

Gene: Squash_27 Start: 14560, Stop: 16392, Start Num: 29

Candidate Starts for Squash_27:

(Start: 29 @14560 has 51 MA's), (31, 14569), (38, 14668), (62, 15034), (77, 15202), (81, 15217), (90, 15277), (98, 15325), (99, 15331), (105, 15355), (114, 15472), (115, 15478), (127, 15571), (142, 15652), (156, 15745), (157, 15760), (163, 15808), (168, 15832), (175, 15880), (176, 15904), (182, 15952), (190, 15994), (201, 16129), (202, 16141), (204, 16150), (213, 16210), (220, 16279), (226, 16312),

Gene: Statler_27 Start: 14472, Stop: 16304, Start Num: 29

Candidate Starts for Statler_27:

(Start: 29 @14472 has 51 MA's), (31, 14481), (38, 14580), (62, 14946), (77, 15114), (81, 15129), (90, 15189), (98, 15237), (99, 15243), (105, 15267), (114, 15384), (115, 15390), (127, 15483), (142, 15564), (156, 15657), (157, 15672), (163, 15720), (168, 15744), (175, 15792), (176, 15816), (182,

15864), (190, 15906), (201, 16041), (202, 16053), (204, 16062), (213, 16122), (220, 16191), (226, 16224),

Gene: StrawberryJamm_27 Start: 13792, Stop: 15624, Start Num: 29

Candidate Starts for StrawberryJamm_27:

(Start: 29 @13792 has 51 MA's), (31, 13801), (38, 13900), (56, 14233), (77, 14434), (81, 14449), (90, 14509), (98, 14557), (105, 14587), (114, 14704), (115, 14710), (127, 14803), (142, 14884), (156, 14977), (157, 14992), (163, 15040), (168, 15064), (175, 15112), (176, 15136), (182, 15184), (190, 15226), (201, 15361), (204, 15382), (211, 15427), (213, 15442), (220, 15511), (226, 15544),

Gene: Sunfish_32 Start: 15117, Stop: 16874, Start Num: 29

Candidate Starts for Sunfish_32:

(Start: 29 @15117 has 51 MA's), (51, 15489), (57, 15534), (75, 15681), (95, 15807), (178, 16431), (180, 16446), (181, 16449), (183, 16455), (213, 16695), (219, 16761), (224, 16788),

Gene: Sunny_27 Start: 14052, Stop: 15890, Start Num: 19

Candidate Starts for Sunny_27:

(11, 13962), (12, 13968), (14, 13995), (15, 13998), (Start: 19 @14052 has 53 MA's), (46, 14373), (66, 14610), (74, 14655), (76, 14691), (86, 14760), (90, 14781), (91, 14784), (99, 14835), (106, 14868), (109, 14934), (120, 15015), (140, 15156), (161, 15321), (164, 15345), (180, 15471), (197, 15585), (198, 15600), (202, 15636), (205, 15648), (209, 15678), (211, 15690), (213, 15705), (229, 15831),

Gene: Tank_20 Start: 13083, Stop: 14846, Start Num: 29

Candidate Starts for Tank_20:

(21, 13017), (Start: 29 @13083 has 51 MA's), (60, 13521), (65, 13590), (70, 13614), (78, 13683), (93, 13764), (107, 13872), (111, 13923), (112, 13935), (113, 13944), (144, 14136), (146, 14145), (147, 14148), (154, 14214), (157, 14235), (158, 14241), (160, 14259), (176, 14370), (185, 14430), (191, 14469), (194, 14511), (205, 14604), (210, 14643), (231, 14796),

Gene: Teamocil_28 Start: 13248, Stop: 15266, Start Num: 19

Candidate Starts for Teamocil_28:

(Start: 19 @13248 has 53 MA's), (52, 13716), (66, 13830), (73, 13869), (76, 13911), (79, 13935), (86, 13980), (90, 14001), (91, 14004), (94, 14019), (103, 14073), (109, 14154), (118, 14214), (129, 14358), (131, 14376), (140, 14544), (141, 14568), (160, 14706), (164, 14733), (178, 14844), (197, 14973), (198, 14988), (202, 15024), (205, 15036), (209, 15066), (213, 15093), (226, 15195),

Gene: Teehee_26 Start: 14727, Stop: 16559, Start Num: 29

Candidate Starts for Teehee_26:

(Start: 29 @14727 has 51 MA's), (31, 14736), (38, 14835), (62, 15201), (77, 15369), (81, 15384), (90, 15444), (98, 15492), (99, 15498), (105, 15522), (114, 15639), (115, 15645), (127, 15738), (142, 15819), (156, 15912), (157, 15927), (163, 15975), (168, 15999), (175, 16047), (176, 16071), (182, 16119), (190, 16161), (201, 16296), (202, 16308), (204, 16317), (213, 16377), (220, 16446), (226, 16479),

Gene: Tempo_24 Start: 13050, Stop: 14828, Start Num: 29

Candidate Starts for Tempo_24:

(Start: 29 @13050 has 51 MA's), (31, 13062), (50, 13404), (63, 13521), (80, 13647), (98, 13761), (105, 13791), (127, 14004), (142, 14085), (144, 14094), (154, 14172), (156, 14178), (157, 14193), (176, 14337), (180, 14379), (190, 14430), (202, 14577), (204, 14586), (223, 14736), (226, 14748),

Gene: Terij_23 Start: 13292, Stop: 15169, Start Num: 19

Candidate Starts for Terij_23:

(Start: 19 @13292 has 53 MA's), (66, 13889), (73, 13928), (76, 13970), (90, 14060), (104, 14129), (119, 14282), (138, 14402), (150, 14519), (164, 14618), (169, 14633), (173, 14669), (174, 14675), (178, 14729), (189, 14786), (191, 14801), (192, 14813), (197, 14858), (202, 14921), (209, 14963), (221, 15071),

Gene: Tissue_25 Start: 14292, Stop: 16115, Start Num: 29

Candidate Starts for Tissue_25:

(Start: 29 @14292 has 51 MA's), (31, 14301), (38, 14400), (56, 14724), (77, 14925), (81, 14940), (90, 15000), (98, 15048), (105, 15078), (114, 15195), (115, 15201), (127, 15294), (142, 15375), (156, 15468), (157, 15483), (163, 15531), (168, 15555), (175, 15603), (176, 15627), (182, 15675), (190, 15717), (201, 15852), (204, 15873), (213, 15933), (220, 16002), (226, 16035),

Gene: Tyrumbra_25 Start: 12826, Stop: 14847, Start Num: 19

Candidate Starts for Tyrumbra_25:

(Start: 19 @12826 has 53 MA's), (66, 13411), (76, 13492), (79, 13516), (86, 13561), (90, 13582), (109, 13735), (133, 13993), (136, 14065), (140, 14125), (141, 14149), (160, 14287), (163, 14311), (164, 14314), (178, 14425), (197, 14554), (198, 14569), (199, 14578), (202, 14605), (205, 14617), (209, 14647), (213, 14674), (226, 14776),

Gene: Viceroy_24 Start: 13492, Stop: 15324, Start Num: 29

Candidate Starts for Viceroy_24:

(Start: 29 @13492 has 51 MA's), (31, 13501), (38, 13600), (62, 13966), (77, 14134), (81, 14149), (90, 14209), (98, 14257), (99, 14263), (105, 14287), (114, 14404), (115, 14410), (127, 14503), (142, 14584), (156, 14677), (157, 14692), (163, 14740), (168, 14764), (175, 14812), (176, 14836), (182, 14884), (190, 14926), (201, 15061), (202, 15073), (204, 15082), (213, 15142), (220, 15211), (226, 15244),

Gene: Wayne3_26 Start: 14457, Stop: 16289, Start Num: 29

Candidate Starts for Wayne3_26:

(Start: 29 @14457 has 51 MA's), (31, 14466), (38, 14565), (62, 14931), (77, 15099), (81, 15114), (90, 15174), (98, 15222), (99, 15228), (105, 15252), (114, 15369), (115, 15375), (127, 15468), (142, 15549), (156, 15642), (157, 15657), (163, 15705), (168, 15729), (175, 15777), (176, 15801), (182, 15849), (190, 15891), (201, 16026), (202, 16038), (204, 16047), (213, 16107), (220, 16176), (226, 16209),

Gene: Wheelie_24 Start: 13808, Stop: 15640, Start Num: 29

Candidate Starts for Wheelie_24:

(Start: 29 @13808 has 51 MA's), (31, 13817), (38, 13916), (62, 14282), (77, 14450), (81, 14465), (90, 14525), (98, 14573), (99, 14579), (105, 14603), (114, 14720), (115, 14726), (127, 14819), (142, 14900), (156, 14993), (157, 15008), (163, 15056), (168, 15080), (175, 15128), (176, 15152), (182, 15200), (190, 15242), (201, 15377), (202, 15389), (204, 15398), (213, 15458), (220, 15527), (226, 15560),

Gene: Wilca_24 Start: 12993, Stop: 14771, Start Num: 29

Candidate Starts for Wilca_24:

(Start: 29 @12993 has 51 MA's), (31, 13005), (50, 13350), (63, 13464), (80, 13590), (90, 13656), (98, 13704), (105, 13734), (127, 13947), (142, 14028), (144, 14037), (154, 14115), (156, 14121), (157, 14136), (176, 14280), (180, 14322), (190, 14373), (202, 14520), (204, 14529), (223, 14679), (226, 14691), (234, 14751),

Gene: Wilde_20 Start: 13011, Stop: 14774, Start Num: 29

Candidate Starts for Wilde_20:

(21, 12945), (Start: 29 @13011 has 51 MA's), (60, 13449), (65, 13518), (70, 13542), (78, 13611), (93, 13692), (107, 13800), (111, 13851), (112, 13863), (113, 13872), (144, 14064), (146, 14073), (147, 14076), (154, 14142), (157, 14163), (158, 14169), (160, 14187), (176, 14298), (185, 14358), (191, 14397), (194, 14439), (205, 14532), (210, 14571), (231, 14724),

Gene: Yeti_27 Start: 13790, Stop: 15646, Start Num: 19

Candidate Starts for Yeti_27:

(Start: 19 @13790 has 53 MA's), (66, 14366), (74, 14411), (76, 14447), (86, 14516), (90, 14537), (91, 14540), (96, 14570), (109, 14690), (120, 14771), (138, 14885), (140, 14912), (164, 15101), (180, 15227), (197, 15341), (198, 15356), (205, 15404), (209, 15434), (211, 15446), (213, 15461), (215, 15476), (219, 15527), (222, 15545), (226, 15563),

Gene: Zagie_25 Start: 13996, Stop: 15828, Start Num: 29

Candidate Starts for Zagie_25:

(Start: 29 @13996 has 51 MA's), (31, 14005), (38, 14104), (62, 14470), (77, 14638), (81, 14653), (90, 14713), (98, 14761), (99, 14767), (105, 14791), (114, 14908), (115, 14914), (127, 15007), (142, 15088), (156, 15181), (157, 15196), (163, 15244), (168, 15268), (175, 15316), (176, 15340), (182, 15388), (190, 15430), (201, 15565), (202, 15577), (204, 15586), (213, 15646), (220, 15715), (226, 15748),

Gene: Zhafia_28 Start: 14319, Stop: 16151, Start Num: 29

Candidate Starts for Zhafia_28:

(Start: 29 @14319 has 51 MA's), (31, 14328), (38, 14427), (62, 14793), (77, 14961), (81, 14976), (90, 15036), (98, 15084), (99, 15090), (105, 15114), (114, 15231), (115, 15237), (127, 15330), (142, 15411), (156, 15504), (157, 15519), (163, 15567), (168, 15591), (175, 15639), (176, 15663), (182, 15711), (190, 15753), (201, 15888), (202, 15900), (204, 15909), (213, 15969), (220, 16038), (226, 16071),