

ONLINE RESOURCES

Differential expression of genes in *Aedes aegypti* strains D2S3 and Moyo-D in response to dengue virus infection

Susanta K. Behura, Consuelo Gomez-Machorro, Becky deBruyn, Diane D. Lovin, Brent W. Harker, Jeanne Romero-Severson, Akio Mori, David W. Severson*

Eck Institute for Global Health, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States

*Corresponding author at: Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, 46556-5645, United States. Tel.: +1 574 360 6718; fax: +1 574 631 7413. E-mail address: severson.1@nd.edu (D.W. Severson).

Legends of Online Resources

Online Resource 1. Validation of microarray data by qRT-PCR. The columns in blue show the qRT-PCR expression levels of the 5 genes indicated in the X-axis as Moyo-D relative to D2S3 expression as shown in the Y-axis. The red columns show relative expression patterns (Moyo-D to D2S3 ratios) of the corresponding genes from the microarray data. Standard errors are indicated for each.

Online Resource 2. List of transcripts differentially expressed in time and strain specific manner. The cDNA ID and the VectorBase gene ID (if not annotated, GenBank Acc# of the cDNA) are provided for each DET. The strain in which the gene is up-regulated after infection is indicated. The specific time point where such up-regulated expression is observed is shown.

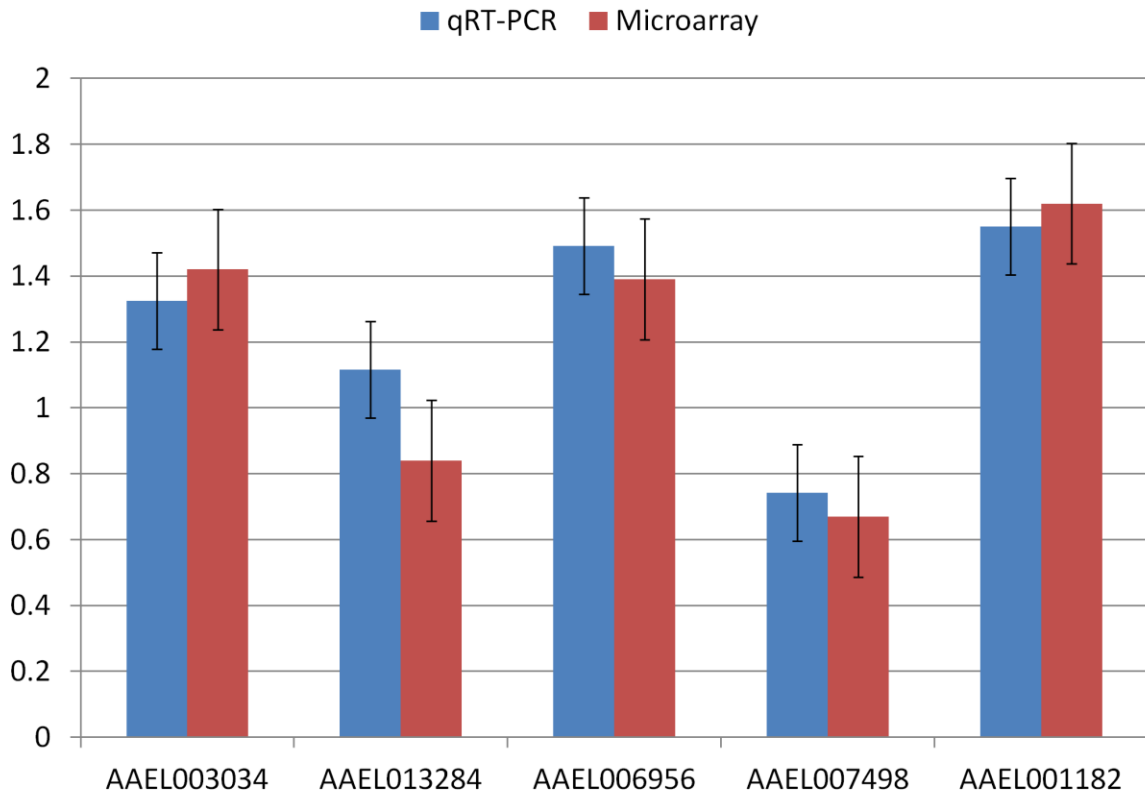
Online Resource 3. List of transcripts differentially expressed in different time (s) and strain (s), but not specific to a strain or time. List of DETs that are up-regulated at different times (3h or 3d) in different strains (D2S3 or Moyo-D). The cDNA ID and the VectorBase gene ID (if not annotated, GenBank Acc# of the cDNA) are provided for each DET. The strain in which the gene is up-regulated after infection is indicated. The specific time point where such up-regulated expression is observed is shown.

Online Resource 4. List of top 10 ranking gene ontology terms associated with differentially expressed genes in different strain (S: D2S3 or R: Moyo-D) and post-infection times (3hr or 3 day). The GO terms in blue color are specific to susceptible (D2S3) and those in black color are specific to refractory (Moyo-D) whereas those in red color are common in both.

Online Resource 5. List of differentially expressed genes mapping to KEGG pathways of *A. aegypti*.

Online Resource 6. List of transcripts which were differentially regulated between D2S3 and Moyo-D (current study) as well as between Moyo-S and Moyo-D (Chauhan *et al.* 2012).

Online Resource 1



Online Resource 2

cDNA ID	VectroBase/G A. aegypti strain	Post-infection time	
NAAFC38	AAEL000101	D2S3	3h
NAAFD21	DV272290	D2S3	3h
NAAFN71	AAEL004861	D2S3	3h
NAAFW75	AAEL013933	D2S3	3h
NAAFY09	DV272983	D2S3	3h
NAAFY23	AAEL003789	D2S3	3h
NAAG158	DV283346	D2S3	3h
NAAG217	AAEL003525	D2S3	3h
NAAG339	AAEL004688	D2S3	3h
NAAG654	AAEL000550	D2S3	3h
NAAG736	AAEL000537	D2S3	3h
NAAGF03	DV282460	D2S3	3h
NAAGI25	AAEL010073	D2S3	3h
NAAGI89	AAEL007595	D2S3	3h
NAAGJ40	AAEL002214	D2S3	3h
NAAGQ14	AAEL012078	D2S3	3h
NAAHG42	AAEL000496	D2S3	3h
NAAHL45	AAEL007125	D2S3	3h
NAAHO91	AAEL006941	D2S3	3h
NAAHS87	DV287386	D2S3	3h
NAAHU69	AAEL006171	D2S3	3h
NAAHX60	AAEL004041	D2S3	3h
NAAIA18	AAEL007854	D2S3	3h
NAAIA81	AAEL004427	D2S3	3h
NAAIB91	AAEL006117	D2S3	3h
NAAIF95	AAEL014012	D2S3	3h
NABMB10	AAEL011801	D2S3	3h
NABMD73	DV292736	D2S3	3h
NABMR17	AAEL008400	D2S3	3h
NABMY53	AAEL009529	D2S3	3h
NABMY86	DV306599	D2S3	3h
NABN147	AAEL007288	D2S3	3h
NABNK30	AAEL002771	D2S3	3h
NABNO03	DV299450	D2S3	3h
NABNO19	DV299599	D2S3	3h
NABNS16	AAEL012740	D2S3	3h
NABNS60	AAEL007665	D2S3	3h
NABNV89	DV296749	D2S3	3h
NABO015	AAEL008882	D2S3	3h
NABO194	AAEL001142	D2S3	3h
NABO278	DV319302	D2S3	3h
NABOA44	AAEL004351	D2S3	3h
NABOE35	DV315507	D2S3	3h
NABOF51	AAEL000079	D2S3	3h
NABOK41	AAEL003419	D2S3	3h

NABOO31	DV314545	D2S3	3h
NABP741	AAEL000240	D2S3	3h
NABP757	DV308766	D2S3	3h
NABPG39	AAEL000620	D2S3	3h
NABPK74	AAEL002238	D2S3	3h
NABPM17	AAEL014931	D2S3	3h
NABPQ23	DV308433	D2S3	3h
NABQ382	DV301917	D2S3	3h
NABQ594	AAEL006864	D2S3	3h
NABQD40	AAEL011993	D2S3	3h
NABQD57	DV304640	D2S3	3h
NABQF83	AAEL005564	D2S3	3h
NABR857	AAEL006997	D2S3	3h
NABRM26	AAEL007767	D2S3	3h
NABRM91	AAEL013688	D2S3	3h
NABRN55	AAEL014868	D2S3	3h
NABRQ37	AAEL002389	D2S3	3h
NABRR40	DV323917	D2S3	3h
NABRR55	AAEL010598	D2S3	3h
NABRR58	AAEL004099	D2S3	3h
NABRU44	AAEL000443	D2S3	3h
NABRU87	DV324802	D2S3	3h
NABRW43	AAEL007063	D2S3	3h
NABRY40	DV325716	D2S3	3h
NABRY64	DV325853	D2S3	3h
NABS029	DV320340	D2S3	3h
NABS195	AAEL012247	D2S3	3h
NABS384	AAEL005069	D2S3	3h
NABS904	DV322849	D2S3	3h
NABS968	AAEL011737	D2S3	3h
NABSD93	DV333164	D2S3	3h
NABSL84	AAEL004971	D2S3	3h
NABSV15	DV332525	D2S3	3h
NABSV81	AAEL007796	D2S3	3h
NABSW88	DV329578	D2S3	3h
NABTD93	AAEL002723	D2S3	3h
NABTF26	AAEL008179	D2S3	3h
NABTS34	AAEL013072	D2S3	3h
NABTU89	DV342161	D2S3	3h
NABTZ21	AAEL013450	D2S3	3h
NABU365	DV339976	D2S3	3h
NABU689	AAEL015651	D2S3	3h
NABUF31	DV338929	D2S3	3h
NABUF67	AAEL010576	D2S3	3h
NABUH83	AAEL008198	D2S3	3h
NABUI94	AAEL008527	D2S3	3h
NABUV81	AAEL014915	D2S3	3h

NABUY94	AAEL007234	D2S3	3h
NABV403	DV336008	D2S3	3h
NABV612	AAEL003781	D2S3	3h
NABV642	AAEL009136	D2S3	3h
NABV684	DV336416	D2S3	3h
NABW133	DV347431	D2S3	3h
NABW234	DV347556	D2S3	3h
NABW385	DV347817	D2S3	3h
NABW481	DV347970	D2S3	3h
NABW511	DV348053	D2S3	3h
NABW733	AAEL005384	D2S3	3h
NABW938	AAEL002457	D2S3	3h
NABWE56	AAEL007669	D2S3	3h
NABWF78	AAEL007108	D2S3	3h
NABWG67	AAEL010099	D2S3	3h
NABWM31	DV346412	D2S3	3h
NABWN47	AAEL009373	D2S3	3h
NABWQ53	AAEL005629	D2S3	3h
NABWS17	AAEL004320	D2S3	3h
NABWV49	DV347018	D2S3	3h
NABWW76	AAEL006859	D2S3	3h
NABWX22	DV344675	D2S3	3h
NABX239	AAEL003844	D2S3	3h
NABX360	AAEL004237	D2S3	3h
NABX673	AAEL006862	D2S3	3h
NABX728	AAEL011449	D2S3	3h
NABX944	DV351939	D2S3	3h
NABXB63	AAEL011282	D2S3	3h
NABXE43	AAEL009112	D2S3	3h
NABXH87	AAEL012165	D2S3	3h
NABXJ54	AAEL003671	D2S3	3h
NABXR15	AAEL014035	D2S3	3h
NABXR74	DV349849	D2S3	3h
NABXW42	DV350613	D2S3	3h
NABXX55	AAEL008517	D2S3	3h
NABY319	AAEL009520	D2S3	3h
NABY649	DV355221	D2S3	3h
NABY907	AAEL001182	D2S3	3h
NABYC21	#N/A	D2S3	3h
NABYC52	AAEL012107	D2S3	3h
NABYD18	AAEL008704	D2S3	3h
NABYE77	AAEL006400	D2S3	3h
NABZ008	DV356692	D2S3	3h
NABZ280	AAEL006733	D2S3	3h
NABZ439	AAEL010414	D2S3	3h
NABZ918	AAEL001378	D2S3	3h
NABZA54	DV358323	D2S3	3h

NABZE01	AAEL008184	D2S3	3h
NACA121	DV363869	D2S3	3h
NACA392	AAEL004121	D2S3	3h
NACA489	AAEL002597	D2S3	3h
NACAB41	DV360095	D2S3	3h
NACAD35	DV360694	D2S3	3h
NACAE65	DV361143	D2S3	3h
NACAG23	AAEL002386	D2S3	3h
NACAT70	AAEL009754	D2S3	3h
NACAU26	AAEL007583	D2S3	3h
NACB155	AAEL005237	D2S3	3h
NACB266	AAEL010318	D2S3	3h
NACB728	AAEL000451	D2S3	3h
NACB758	#N/A	D2S3	3h
NACBA83	AAEL014913	D2S3	3h
NACBB07	AAEL011288	D2S3	3h
NACBF67	AAEL013633	D2S3	3h
NACBH45	AAEL002686	D2S3	3h
NACBI10	AAEL013907	D2S3	3h
NACBS25	AAEL009809	D2S3	3h
NACBV28	AAEL014749	D2S3	3h
NACM122	DV374808	D2S3	3h
NACM241	DV375037	D2S3	3h
NACMG48	DV372656	D2S3	3h
NACMH09	DV372753	D2S3	3h
NACMH10	DV372755	D2S3	3h
NACMK07	DV373266	D2S3	3h
NACMM30	DV373578	D2S3	3h
NACMN83	DV373838	D2S3	3h
NACMO33	AAEL002512	D2S3	3h
NACMP24	AAEL009059	D2S3	3h
NACMW32	AAEL011000	D2S3	3h
NACMY47	DV371644	D2S3	3h
NACMZ81	DV372159	D2S3	3h
NACN280	DV380050	D2S3	3h
NACN337	DV380135	D2S3	3h
NACN463	DV380324	D2S3	3h
NACNF07	AAEL008504	D2S3	3h
NACNM57	AAEL013613	D2S3	3h
NADA965	AAEL011780	D2S3	3h
NADAC79	DV382477	D2S3	3h
NADAI49	AAEL007240	D2S3	3h
NADAI81	AAEL002798	D2S3	3h
NADAU20	AAEL002881	D2S3	3h
NADAX44	AAEL010762	D2S3	3h
NADB267	AAEL003237	D2S3	3h
NADB789	DV394655	D2S3	3h

NADB883	AAEL011927	D2S3	3h
NADB932	AAEL005820	D2S3	3h
NADBC39	AAEL013874	D2S3	3h
NADBF09	AAEL008286	D2S3	3h
NADBH48	AAEL009364	D2S3	3h
NADBI46	AAEL001447	D2S3	3h
NADBJ96	AAEL014042	D2S3	3h
NADBK44	AAEL008507	D2S3	3h
NADBM68	DV391014	D2S3	3h
NADBU38	AAEL006806	D2S3	3h
NADBW45	AAEL007029	D2S3	3h
NADC294	AAEL007295	D2S3	3h
NADC644	DV384693	D2S3	3h
NADC918	DV385539	D2S3	3h
NADCC85	AAEL013203	D2S3	3h
NADCU09	AAEL006408	D2S3	3h
NADCY19	AAEL001906	D2S3	3h
NADDC89	AAEL000758	D2S3	3h
NADDD61	AAEL008216	D2S3	3h
NADDF53	AAEL014388	D2S3	3h
NADDI49	AAEL004515	D2S3	3h
NADDJ21	DV430519	D2S3	3h
NADDK16	AAEL012740	D2S3	3h
NADDN77	AAEL003397	D2S3	3h
NADDR57	AAEL003548	D2S3	3h
NADDS01	AAEL011305	D2S3	3h
NADDT10	AAEL004209	D2S3	3h
NADDW84	DV398958	D2S3	3h
NADDW93	AAEL012943	D2S3	3h
NADE018	AAEL000262	D2S3	3h
NADE131	AAEL004938	D2S3	3h
NADE386	AAEL002844	D2S3	3h
NADV184	AAEL009324	D2S3	3h
NADV471	DV406570	D2S3	3h
NADV501	AAEL002175	D2S3	3h
NADVO20	AAEL006239	D2S3	3h
NADVR04	AAEL009937	D2S3	3h
NADVS02	DV399919	D2S3	3h
NADVS07	AAEL015010	D2S3	3h
NADVW55	AAEL004319	D2S3	3h
NADVX13	AAEL001235	D2S3	3h
NADVY44	AAEL000335	D2S3	3h
NADVZ87	AAEL004049	D2S3	3h
NADW070	AAEL003531	D2S3	3h
NADW335	AAEL007898	D2S3	3h
NADW483	AAEL009399	D2S3	3h
NADW554	AAEL001700	D2S3	3h

NADW665	AAEL012607	D2S3	3h
NADW990	AAEL003962	D2S3	3h
NADWA53	AAEL006398	D2S3	3h
NADWB15	DV413709	D2S3	3h
NADWD21	AAEL001516	D2S3	3h
NADWD67	DV414242	D2S3	3h
NADWD69	AAEL002614	D2S3	3h
NADWE45	AAEL001110	D2S3	3h
NADWK04	DV410622	D2S3	3h
NADWN78	DV414290	D2S3	3h
NADWO51	AAEL011639	D2S3	3h
NADWO75	AAEL009129	D2S3	3h
NADWS82	AAEL010937	D2S3	3h
NADWT61	DV410117	D2S3	3h
NADWU29	AAEL007893	D2S3	3h
NADWV36	DV410904	D2S3	3h
NADWX27	DV411758	D2S3	3h
NADWX63	AAEL001722	D2S3	3h
NADWY10	AAEL006161	D2S3	3h
NADWY43	AAEL014260	D2S3	3h
NADX317	DV406942	D2S3	3h
NADX440	AAEL012527	D2S3	3h
NADX583	AAEL002406	D2S3	3h
NADX760	AAEL013526	D2S3	3h
NADX828	DV408429	D2S3	3h
NADX913	AAEL004482	D2S3	3h
NADXG16	DV404545	D2S3	3h
NADXI31	AAEL001614	D2S3	3h
NADXK91	AAEL005613	D2S3	3h
NADXS79	DV428738	D2S3	3h
NADXY36	AAEL014958	D2S3	3h
NADXZ63	AAEL011851	D2S3	3h
NADY013	DV426794	D2S3	3h
NADY282	AAEL011516	D2S3	3h
NADYB68	DV421966	D2S3	3h
NADYR48	DV418423	D2S3	3h
NADYW92	AAEL003287	D2S3	3h
NADZ264	AAEL004744	D2S3	3h
NADZG08	AAEL015262	D2S3	3h
NADZX48	AAEL010185	D2S3	3h
NAEA373	DV437726	D2S3	3h
NAAF052	AAEL013260	D2S3	3d
NAAF060	DV277498	D2S3	3d
NAAF122	AAEL011103	D2S3	3d
NAAF217	DV278103	D2S3	3d
NAAF310	AAEL010847	D2S3	3d
NAAF314	AAEL004435	D2S3	3d

NAAF402	AAEL008587	D2S3	3d
NAAF427	AAEL006363	D2S3	3d
NAAF529	AAEL000193	D2S3	3d
NAAF638	DV279574	D2S3	3d
NAAF703	AAEL006061	D2S3	3d
NAAF715	AAEL007322	D2S3	3d
NAAF719	AAEL012287	D2S3	3d
NAAFA91	AAEL006279	D2S3	3d
NAAFB09	AAEL008379	D2S3	3d
NAAFL12	AAEL005884	D2S3	3d
NAAFO21	DV276175	D2S3	3d
NAAFQ19	AAEL008085	D2S3	3d
NAAFS21	AAEL001160	D2S3	3d
NAAFT58	AAEL008810	D2S3	3d
NAAFW69	DV272522	D2S3	3d
NAAFY66	AAEL009244	D2S3	3d
NAAG321	DV283653	D2S3	3d
NAAG452	AAEL003165	D2S3	3d
NAAGA14	DV284802	D2S3	3d
NAAGV92	AAEL007582	D2S3	3d
NAAH353	AAEL008641	D2S3	3d
NAAH547	DV274920	D2S3	3d
NAAHF17	DV276505	D2S3	3d
NAAHG74	AAEL011082	D2S3	3d
NAAHI08	AAEL012816	D2S3	3d
NAAHN45	AAEL002334	D2S3	3d
NAAHS75	DV287377	D2S3	3d
NAAHZ40	AAEL002397	D2S3	3d
NAAI704	DV286380	D2S3	3d
NAAI753	AAEL003939	D2S3	3d
NAAI783	AAEL001271	D2S3	3d
NABM290	AAEL002019	D2S3	3d
NABM719	AAEL008427	D2S3	3d
NABM742	DV298463	D2S3	3d
NABM792	DV298563	D2S3	3d
NABMA27	AAEL006146	D2S3	3d
NABMB46	AAEL001567	D2S3	3d
NABMD26	AAEL002530	D2S3	3d
NABMR13	AAEL007845	D2S3	3d
NABMV71	DV305971	D2S3	3d
NABN083	DV306958	D2S3	3d
NABN383	DV303875	D2S3	3d
NABN454	DV304241	D2S3	3d
NABN488	DV304331	D2S3	3d
NABN636	AAEL006589	D2S3	3d
NABNP66	AAEL007000	D2S3	3d
NABO173	AAEL002469	D2S3	3d

NABOA70	AAEL007973	D2S3	3d
NABOB82	AAEL000292	D2S3	3d
NABOL05	DV313856	D2S3	3d
NABOL89	AAEL006667	D2S3	3d
NABOP03	AAEL005676	D2S3	3d
NABOQ04	DV314858	D2S3	3d
NABOX21	AAEL014971	D2S3	3d
NABP327	AAEL013857	D2S3	3d
NABP386	AAEL003206	D2S3	3d
NABP617	AAEL009887	D2S3	3d
NABP733	AAEL008657	D2S3	3d
NABP881	AAEL006223	D2S3	3d
NABPA33	AAEL003275	D2S3	3d
NABPA40	AAEL003006	D2S3	3d
NABPB74	DV309409	D2S3	3d
NABPG19	AAEL010565	D2S3	3d
NABPI87	AAEL010211	D2S3	3d
NABPT30	AAEL014539	D2S3	3d
NABPU76	AAEL015533	D2S3	3d
NABPV94	AAEL006371	D2S3	3d
NABPZ57	AAEL002386	D2S3	3d
NABPZ91	AAEL011453	D2S3	3d
NABQ552	DV302524	D2S3	3d
NABQ611	AAEL002286	D2S3	3d
NABQC31	DV304379	D2S3	3d
NABQE60	DV319926	D2S3	3d
NABRC29	DV320449	D2S3	3d
NABRV03	AAEL001549	D2S3	3d
NABRY21	AAEL010198	D2S3	3d
NABSV41	AAEL003129	D2S3	3d
NABTI63	AAEL008476	D2S3	3d
NABUW82	AAEL001622	D2S3	3d
NABW101	DV347402	D2S3	3d
NABW176	AAEL007762	D2S3	3d
NABW179	DV347512	D2S3	3d
NABW545	DV348082	D2S3	3d
NABW704	AAEL014530	D2S3	3d
NABW840	AAEL010674	D2S3	3d
NABWI18	DV345676	D2S3	3d
NABWJ11	AAEL009882	D2S3	3d
NABWK70	DV345603	D2S3	3d
NABWL42	AAEL009105	D2S3	3d
NABWQ08	AAEL004042	D2S3	3d
NABWR27	AAEL005460	D2S3	3d
NABWS44	DV343801	D2S3	3d
NABWS48	AAEL002181	D2S3	3d
NABWW55	AAEL004462	D2S3	3d

NABWW78	AAEL006291	D2S3	3d
NABWX06	AAEL010520	D2S3	3d
NABXC23	DV353841	D2S3	3d
NABY125	AAEL005098	D2S3	3d
NABY359	AAEL010829	D2S3	3d
NABY770	AAEL010396	D2S3	3d
NABZ758	DV357860	D2S3	3d
NACA016	AAEL008732	D2S3	3d
NACA369	AAEL006836	D2S3	3d
NACA446	AAEL009283	D2S3	3d
NACA864	AAEL006957	D2S3	3d
NACAF29	AAEL012064	D2S3	3d
NACAO45	AAEL007536	D2S3	3d
NACAR71	AAEL011290	D2S3	3d
NACAS57	AAEL011362	D2S3	3d
NACAW48	AAEL004873	D2S3	3d
NACB215	AAEL009809	D2S3	3d
NACB838	DV365102	D2S3	3d
NACB885	AAEL008557	D2S3	3d
NACBA92	AAEL007820	D2S3	3d
NACBD82	DV366717	D2S3	3d
NACBG41	AAEL008110	D2S3	3d
NACBO20	AAEL013729	D2S3	3d
NACBO80	AAEL006364	D2S3	3d
NACBP36	AAEL003005	D2S3	3d
NACBQ61	AAEL009617	D2S3	3d
NACBQ95	AAEL003761	D2S3	3d
NACBT30	AAEL008328	D2S3	3d
NACBU06	AAEL011739	D2S3	3d
NACM331	AAEL011746	D2S3	3d
NACMD30	AAEL000942	D2S3	3d
NACML76	AAEL008714	D2S3	3d
NACMN14	AAEL011659	D2S3	3d
NACMU89	DV370685	D2S3	3d
NACMW60	AAEL005160	D2S3	3d
NACN806	DV380828	D2S3	3d
NADA629	AAEL000363	D2S3	3d
NADA679	DV389876	D2S3	3d
NADA680	AAEL011758	D2S3	3d
NADAC03	AAEL010025	D2S3	3d
NADAF10	AAEL009101	D2S3	3d
NADAH26	AAEL007830	D2S3	3d
NADAK22	DV385374	D2S3	3d
NADAL91	AAEL005629	D2S3	3d
NADAS34	AAEL000691	D2S3	3d
NADAT49	DV381834	D2S3	3d
NADB135	AAEL014625	D2S3	3d

NADB254	DV393838	D2S3	3d
NADBH39	AAEL012438	D2S3	3d
NADBM23	DV390908	D2S3	3d
NADBN83	DV391188	D2S3	3d
NADBT91	AAEL004997	D2S3	3d
NADC113	AAEL010656	D2S3	3d
NADC521	DV384934	D2S3	3d
NADC862	AAEL008461	D2S3	3d
NADCA90	AAEL009968	D2S3	3d
NADCF81	AAEL008952	D2S3	3d
NADCJ64	AAEL000569	D2S3	3d
NADCX11	AAEL004107	D2S3	3d
NADD251	DV432384	D2S3	3d
NADDA44	AAEL008063	D2S3	3d
NADDA63	AAEL004412	D2S3	3d
NADDB87	AAEL005567	D2S3	3d
NADDG86	AAEL011830	D2S3	3d
NADDH71	AAEL005934	D2S3	3d
NADDJ70	DV431989	D2S3	3d
NADDL55	AAEL011105	D2S3	3d
NADDS75	AAEL001126	D2S3	3d
NADDU56	AAEL004249	D2S3	3d
NADDV29	AAEL003428	D2S3	3d
NADE580	DV397361	D2S3	3d
NADE977	AAEL007898	D2S3	3d
NADEC06	DV395396	D2S3	3d
NADXJ43	AAEL009074	D2S3	3d
NADXL06	AAEL007705	D2S3	3d
NADXO19	AAEL009391	D2S3	3d
NADXT94	AAEL004069	D2S3	3d
NADXW02	AAEL005162	D2S3	3d
NADY075	AAEL009757	D2S3	3d
NADYC86	AAEL013221	D2S3	3d
NADYE13	AAEL009185	D2S3	3d
NADYG39	DV419572	D2S3	3d
NADYQ77	AAEL000422	D2S3	3d
NADYS15	AAEL013827	D2S3	3d
NADZD58	DV418452	D2S3	3d
NADZL01	AAEL010892	D2S3	3d
NAAF043	AAEL002812	Moyo-D	3h
NAAF116	DV277747	Moyo-D	3h
NAAF155	AAEL005353	Moyo-D	3h
NAAF222	AAEL010833	Moyo-D	3h
NAAF395	AAEL015633	Moyo-D	3h
NAAF466	DV279088	Moyo-D	3h
NAAF530	AAEL015014	Moyo-D	3h
NAAF618	AAEL007729	Moyo-D	3h

NAAF704	AAEL005619	Moyo-D	3h
NAAFD67	AAEL011016	Moyo-D	3h
NAAFE36	AAEL005355	Moyo-D	3h
NAAFG17	DV273262	Moyo-D	3h
NAAFL21	DV274949	Moyo-D	3h
NAAFO24	AAEL011380	Moyo-D	3h
NAAFR76	AAEL007149	Moyo-D	3h
NAAFS44	AAEL002107	Moyo-D	3h
NAAFT68	AAEL010422	Moyo-D	3h
NAAFV04	AAEL008668	Moyo-D	3h
NAAFV44	AAEL008486	Moyo-D	3h
NAAG077	AAEL012874	Moyo-D	3h
NAAG239	DV283494	Moyo-D	3h
NAAG418	AAEL005968	Moyo-D	3h
NAAG486	AAEL000470	Moyo-D	3h
NAAG930	AAEL000173	Moyo-D	3h
NAAGI48	AAEL011250	Moyo-D	3h
NAAGI67	AAEL002554	Moyo-D	3h
NAAGJ74	AAEL008430	Moyo-D	3h
NAAGK27	DV280088	Moyo-D	3h
NAAGP27	AAEL009613	Moyo-D	3h
NAAGQ10	AAEL004406	Moyo-D	3h
NAAGS33	AAEL000016	Moyo-D	3h
NAAGT83	AAEL007592	Moyo-D	3h
NAAGU52	AAEL013734	Moyo-D	3h
NAAGV27	AAEL006340	Moyo-D	3h
NAAGW27	AAEL012301	Moyo-D	3h
NAAGW30	AAEL009819	Moyo-D	3h
NAAH492	AAEL003143	Moyo-D	3h
NAAHL85	AAEL007913	Moyo-D	3h
NAAHN61	DV289787	Moyo-D	3h
NAAHN69	DV289839	Moyo-D	3h
NAAHP85	AAEL003043	Moyo-D	3h
NAAHR26	DV287209	Moyo-D	3h
NAAHS92	DV287485	Moyo-D	3h
NAAHW19	DV287983	Moyo-D	3h
NAAI014	DV288449	Moyo-D	3h
NAAI122	AAEL001252	Moyo-D	3h
NAAI583	AAEL008590	Moyo-D	3h
NAAI837	AAEL014301	Moyo-D	3h
NAAIC78	AAEL004378	Moyo-D	3h
NAAIE80	AAEL008848	Moyo-D	3h
NABM094	DV296421	Moyo-D	3h
NABM575	DV297586	Moyo-D	3h
NABM873	AAEL013999	Moyo-D	3h
NABMB07	AAEL014733	Moyo-D	3h
NABMC70	DV292322	Moyo-D	3h

NABMC85	DV292371	Moyo-D	3h
NABMF29	DV293423	Moyo-D	3h
NABMG46	DV293752	Moyo-D	3h
NABML07	AAEL013178	Moyo-D	3h
NABMN36	DV290556	Moyo-D	3h
NABMR75	AAEL000064	Moyo-D	3h
NABMY10	DV306426	Moyo-D	3h
NABN004	AAEL007691	Moyo-D	3h
NABN424	AAEL009498	Moyo-D	3h
NABN785	DV305241	Moyo-D	3h
NABN982	AAEL002291	Moyo-D	3h
NABNA40	AAEL013147	Moyo-D	3h
NABNB14	DV300570	Moyo-D	3h
NABNG73	DV302789	Moyo-D	3h
NABNJ58	AAEL007673	Moyo-D	3h
NABNN67	AAEL007322	Moyo-D	3h
NABNT92	AAEL008519	Moyo-D	3h
NABNU44	DV295934	Moyo-D	3h
NABNV46	DV296456	Moyo-D	3h
NABO033	DV318806	Moyo-D	3h
NABO440	AAEL003524	Moyo-D	3h
NABO618	DV316791	Moyo-D	3h
NABO969	DV317565	Moyo-D	3h
NABOJ11	AAEL004793	Moyo-D	3h
NABOO95	AAEL001421	Moyo-D	3h
NABOV37	AAEL004311	Moyo-D	3h
NABOX94	AAEL001804	Moyo-D	3h
NABOZ75	AAEL009593	Moyo-D	3h
NABP061	AAEL008068	Moyo-D	3h
NABP123	AAEL004574	Moyo-D	3h
NABP417	AAEL007962	Moyo-D	3h
NABP519	DV311523	Moyo-D	3h
NABP719	AAEL001933	Moyo-D	3h
NABP725	DV311823	Moyo-D	3h
NABP729	AAEL000866	Moyo-D	3h
NABPA62	AAEL007215	Moyo-D	3h
NABPB83	DV309387	Moyo-D	3h
NABPD14	AAEL006647	Moyo-D	3h
NABPE05	AAEL010798	Moyo-D	3h
NABPH06	AAEL009563	Moyo-D	3h
NABPH78	AAEL011751	Moyo-D	3h
NABPK34	AAEL012161	Moyo-D	3h
NABPK82	DV307589	Moyo-D	3h
NABPL72	AAEL013285	Moyo-D	3h
NABPP03	AAEL014493	Moyo-D	3h
NABPP16	AAEL013025	Moyo-D	3h
NABPQ03	AAEL011817	Moyo-D	3h

NABPQ90	DV308567	Moyo-D	3h
NABPR07	AAEL010509	Moyo-D	3h
NABPU79	AAEL000273	Moyo-D	3h
NABPY37	AAEL010109	Moyo-D	3h
NABPY92	AAEL005418	Moyo-D	3h
NABPZ31	AAEL002291	Moyo-D	3h
NABPZ85	DV300889	Moyo-D	3h
NABQ046	DV301070	Moyo-D	3h
NABQ221	DV301585	Moyo-D	3h
NABQ228	AAEL001334	Moyo-D	3h
NABQ421	DV302055	Moyo-D	3h
NABQ449	AAEL009683	Moyo-D	3h
NABQ453	AAEL008835	Moyo-D	3h
NABQ610	AAEL005028	Moyo-D	3h
NABQ642	DV302758	Moyo-D	3h
NABQ789	AAEL012143	Moyo-D	3h
NABQ802	AAEL003372	Moyo-D	3h
NABQ958	DV303595	Moyo-D	3h
NABQA27	AAEL004249	Moyo-D	3h
NABQB52	DV304170	Moyo-D	3h
NABQB60	AAEL012847	Moyo-D	3h
NABQC24	AAEL004563	Moyo-D	3h
NABQD71	DV304671	Moyo-D	3h
NABQD72	AAEL010187	Moyo-D	3h
NABQF37	AAEL006467	Moyo-D	3h
NABR842	AAEL001605	Moyo-D	3h
NABR856	AAEL007728	Moyo-D	3h
NABRI47	DV321955	Moyo-D	3h
NABRJ19	DV322118	Moyo-D	3h
NABRR29	DV323899	Moyo-D	3h
NABRS19	AAEL005901	Moyo-D	3h
NABRS45	AAEL002503	Moyo-D	3h
NABRT95	AAEL011830	Moyo-D	3h
NABRW45	DV325268	Moyo-D	3h
NABS060	AAEL009294	Moyo-D	3h
NABS240	AAEL011224	Moyo-D	3h
NABS645	AAEL011399	Moyo-D	3h
NABS876	DV322772	Moyo-D	3h
NABS886	AAEL005027	Moyo-D	3h
NABSA42	AAEL010586	Moyo-D	3h
NABSB38	AAEL005386	Moyo-D	3h
NABSB72	DV332799	Moyo-D	3h
NABSD10	DV333047	Moyo-D	3h
NABSD14	DV333031	Moyo-D	3h
NABSH02	DV333689	Moyo-D	3h
NABSU33	DV332379	Moyo-D	3h
NABT878	AAEL008620	Moyo-D	3h

NABT893	DV327542	Moyo-D	3h
NABT916	AAEL012262	Moyo-D	3h
NABTC72	AAEL003068	Moyo-D	3h
NABU115	DV343106	Moyo-D	3h
NABU720	DV340498	Moyo-D	3h
NABUJ42	DV339533	Moyo-D	3h
NABUU18	AAEL014082	Moyo-D	3h
NABUU90	DV338031	Moyo-D	3h
NABV884	AAEL011017	Moyo-D	3h
NABW122	AAEL007136	Moyo-D	3h
NABW642	AAEL003751	Moyo-D	3h
NABW750	AAEL007402	Moyo-D	3h
NABW813	AAEL015458	Moyo-D	3h
NABW889	AAEL011387	Moyo-D	3h
NABWA13	DV343752	Moyo-D	3h
NABWA82	DV343954	Moyo-D	3h
NABWC86	DV344004	Moyo-D	3h
NABWE35	AAEL000160	Moyo-D	3h
NABWG45	DV345407	Moyo-D	3h
NABWH26	AAEL008077	Moyo-D	3h
NABWH28	DV345562	Moyo-D	3h
NABWI69	AAEL008579	Moyo-D	3h
NABWJ95	AAEL011161	Moyo-D	3h
NABWK22	AAEL012297	Moyo-D	3h
NABWL16	AAEL011174	Moyo-D	3h
NABX019	AAEL006158	Moyo-D	3h
NABX095	DV352971	Moyo-D	3h
NABX324	DV353150	Moyo-D	3h
NABX402	AAEL014330	Moyo-D	3h
NABX839	AAEL007076	Moyo-D	3h
NABXD49	AAEL004856	Moyo-D	3h
NABXG70	AAEL014550	Moyo-D	3h
NABXG80	AAEL006158	Moyo-D	3h
NABXK47	AAEL010020	Moyo-D	3h
NABXP75	DV349409	Moyo-D	3h
NABXQ32	AAEL006736	Moyo-D	3h
NABXR17	DV349748	Moyo-D	3h
NABXS11	AAEL009957	Moyo-D	3h
NABXZ42	AAEL011990	Moyo-D	3h
NABY134	AAEL001308	Moyo-D	3h
NABY263	AAEL011641	Moyo-D	3h
NABY304	AAEL008279	Moyo-D	3h
NABY343	AAEL012546	Moyo-D	3h
NABY349	AAEL000551	Moyo-D	3h
NABY405	DV354834	Moyo-D	3h
NABY490	AAEL006833	Moyo-D	3h
NABY879	AAEL010940	Moyo-D	3h

NABYA41	DV355842	Moyo-D	3h
NABYC44	AAEL012737	Moyo-D	3h
NABYC60	AAEL013009	Moyo-D	3h
NABYF17	AAEL001540	Moyo-D	3h
NABYF93	AAEL009216	Moyo-D	3h
NABZ375	AAEL013863	Moyo-D	3h
NABZ780	DV357897	Moyo-D	3h
NABZ958	DV358170	Moyo-D	3h
NABZE90	AAEL012888	Moyo-D	3h
NACA003	AAEL009634	Moyo-D	3h
NACA394	DV364330	Moyo-D	3h
NACA981	AAEL009082	Moyo-D	3h
NACAA42	AAEL000404	Moyo-D	3h
NACAC05	DV360301	Moyo-D	3h
NACAC95	AAEL005405	Moyo-D	3h
NACAD88	AAEL003158	Moyo-D	3h
NACAF94	AAEL009492	Moyo-D	3h
NACAG96	AAEL003950	Moyo-D	3h
NACAI43	AAEL000090	Moyo-D	3h
NACAJ11	AAEL010846	Moyo-D	3h
NACAN47	AAEL001851	Moyo-D	3h
NACAO37	AAEL008138	Moyo-D	3h
NACAO49	AAEL007481	Moyo-D	3h
NACAO54	AAEL008188	Moyo-D	3h
NACAR32	DV363639	Moyo-D	3h
NACAS50	AAEL006630	Moyo-D	3h
NACAT55	AAEL006712	Moyo-D	3h
NACAW80	AAEL004311	Moyo-D	3h
NACAY43	AAEL008807	Moyo-D	3h
NACAY73	AAEL001516	Moyo-D	3h
NACAZ10	AAEL014321	Moyo-D	3h
NACB120	AAEL003508	Moyo-D	3h
NACB232	AAEL000010	Moyo-D	3h
NACB279	AAEL001154	Moyo-D	3h
NACB341	AAEL007038	Moyo-D	3h
NACB454	AAEL002716	Moyo-D	3h
NACB782	AAEL013975	Moyo-D	3h
NACB817	AAEL008592	Moyo-D	3h
NACBA17	AAEL010411	Moyo-D	3h
NACBB56	#N/A	Moyo-D	3h
NACBB70	AAEL004504	Moyo-D	3h
NACBB79	AAEL012187	Moyo-D	3h
NACBF88	AAEL006085	Moyo-D	3h
NACBG31	AAEL013950	Moyo-D	3h
NACBI60	AAEL014012	Moyo-D	3h
NACBL91	DV368002	Moyo-D	3h
NACBM08	AAEL012864	Moyo-D	3h

NACBO25	DV368467	Moyo-D	3h
NACBQ80	AAEL001112	Moyo-D	3h
NACBQ89	DV368881	Moyo-D	3h
NACBT40	AAEL004586	Moyo-D	3h
NACBT91	AAEL007084	Moyo-D	3h
NACBV18	AAEL002761	Moyo-D	3h
NACM149	DV374880	Moyo-D	3h
NACM460	DV375386	Moyo-D	3h
NACM487	AAEL010326	Moyo-D	3h
NACM945	AAEL009110	Moyo-D	3h
NACMJ27	AAEL011742	Moyo-D	3h
NACMK45	AAEL000396	Moyo-D	3h
NACMR02	DV374354	Moyo-D	3h
NACMW80	AAEL006661	Moyo-D	3h
NACN226	AAEL010906	Moyo-D	3h
NACNB91	AAEL009646	Moyo-D	3h
NACNG16	DV377540	Moyo-D	3h
NACNJ41	AAEL010366	Moyo-D	3h
NACNL47	AAEL010877	Moyo-D	3h
NACNM30	AAEL003331	Moyo-D	3h
NACNN29	#N/A	Moyo-D	3h
NACNQ06	AAEL006858	Moyo-D	3h
NACNR67	DV379305	Moyo-D	3h
NACNU50	AAEL005261	Moyo-D	3h
NADA287	AAEL005112	Moyo-D	3h
NADA459	AAEL007642	Moyo-D	3h
NADA682	AAEL009221	Moyo-D	3h
NADAA40	AAEL001887	Moyo-D	3h
NADAC70	DV382429	Moyo-D	3h
NADAE29	AAEL012686	Moyo-D	3h
NADAM61	AAEL004694	Moyo-D	3h
NADAQ01	AAEL010276	Moyo-D	3h
NADAT81	AAEL011485	Moyo-D	3h
NADAV10	AAEL011622	Moyo-D	3h
NADAV92	AAEL008073	Moyo-D	3h
NADAY37	AAEL009687	Moyo-D	3h
NADAZ45	AAEL013578	Moyo-D	3h
NADAZ95	AAEL013472	Moyo-D	3h
NADB005	AAEL009435	Moyo-D	3h
NADB182	DV393778	Moyo-D	3h
NADB203	AAEL001321	Moyo-D	3h
NADB255	DV393840	Moyo-D	3h
NADB382	DV394081	Moyo-D	3h
NADB554	DV394610	Moyo-D	3h
NADB744	DV394569	Moyo-D	3h
NADBE55	DV392739	Moyo-D	3h
NADBJ91	DV390434	Moyo-D	3h

NADBK56	DV390580	Moyo-D	3h
NADC183	DV389643	Moyo-D	3h
NADC191	AAEL014497	Moyo-D	3h
NADC474	DV384250	Moyo-D	3h
NADC659	DV385307	Moyo-D	3h
NADC891	DV386168	Moyo-D	3h
NADC924	AAEL015127	Moyo-D	3h
NADC933	AAEL013133	Moyo-D	3h
NADCA53	AAEL001698	Moyo-D	3h
NADCA85	AAEL015199	Moyo-D	3h
NADCC48	DV435783	Moyo-D	3h
NADCD32	AAEL005567	Moyo-D	3h
NADCE32	AAEL013402	Moyo-D	3h
NADCE53	AAEL001129	Moyo-D	3h
NADCG48	DV436492	Moyo-D	3h
NADCH69	AAEL011233	Moyo-D	3h
NADCH84	AAEL006246	Moyo-D	3h
NADCI02	AAEL008389	Moyo-D	3h
NADCM24	AAEL000515	Moyo-D	3h
NADCO22	AAEL008663	Moyo-D	3h
NADCR41	AAEL004112	Moyo-D	3h
NADCR63	DV434921	Moyo-D	3h
NADCU87	AAEL000828	Moyo-D	3h
NADD388	DV432638	Moyo-D	3h
NADD591	AAEL009430	Moyo-D	3h
NADD620	AAEL010299	Moyo-D	3h
NADD762	AAEL012163	Moyo-D	3h
NADD777	AAEL015631	Moyo-D	3h
NADD787	DV433219	Moyo-D	3h
NADD816	AAEL015039	Moyo-D	3h
NADDB26	AAEL000674	Moyo-D	3h
NADDE14	AAEL009811	Moyo-D	3h
NADDE33	AAEL006389	Moyo-D	3h
NADDG77	AAEL011656	Moyo-D	3h
NADDH56	DV431616	Moyo-D	3h
NADDJ85	AAEL000672	Moyo-D	3h
NADDK11	DV432067	Moyo-D	3h
NADDO65	DV429564	Moyo-D	3h
NADDR05	AAEL010051	Moyo-D	3h
NADDS61	AAEL013796	Moyo-D	3h
NADDS62	AAEL008865	Moyo-D	3h
NADDU41	AAEL008435	Moyo-D	3h
NADDY15	DV428880	Moyo-D	3h
NADDY82	AAEL008562	Moyo-D	3h
NADDZ87	DV396337	Moyo-D	3h
NADE010	AAEL001017	Moyo-D	3h
NADE179	AAEL013697	Moyo-D	3h

NADE291	AAEL008324	Moyo-D	3h
NADE515	AAEL005715	Moyo-D	3h
NADE742	AAEL004990	Moyo-D	3h
NADE829	AAEL002550	Moyo-D	3h
NADE866	DV397663	Moyo-D	3h
NADE914	AAEL000472	Moyo-D	3h
NADEB10	AAEL010247	Moyo-D	3h
NADEB19	AAEL007777	Moyo-D	3h
NADED85	AAEL004433	Moyo-D	3h
NADVG75	AAEL001411	Moyo-D	3h
NADVN50	AAEL006469	Moyo-D	3h
NADVP21	AAEL011871	Moyo-D	3h
NADW380	DV401801	Moyo-D	3h
NADW651	AAEL012856	Moyo-D	3h
NADWD08	DV415867	Moyo-D	3h
NADWS45	AAEL007535	Moyo-D	3h
NADWT58	AAEL011870	Moyo-D	3h
NADWU59	DV407839	Moyo-D	3h
NADWW30	DV408500	Moyo-D	3h
NADXB12	DV428072	Moyo-D	3h
NADXB44	DV428148	Moyo-D	3h
NADXB57	AAEL005635	Moyo-D	3h
NADXE29	DV428673	Moyo-D	3h
NADXG51	DV404717	Moyo-D	3h
NADXH18	AAEL002488	Moyo-D	3h
NADXI47	AAEL014054	Moyo-D	3h
NADXJ71	AAEL014695	Moyo-D	3h
NADXO80	DV424207	Moyo-D	3h
NADXQ12	DV424447	Moyo-D	3h
NADXR10	AAEL007900	Moyo-D	3h
NADXT74	AAEL001223	Moyo-D	3h
NADXW72	DV426223	Moyo-D	3h
NADY463	AAEL012397	Moyo-D	3h
NADY552	AAEL002496	Moyo-D	3h
NADY883	AAEL011072	Moyo-D	3h
NADY965	AAEL012184	Moyo-D	3h
NADYE47	AAEL001547	Moyo-D	3h
NADYE59	AAEL003586	Moyo-D	3h
NADYH07	DV422877	Moyo-D	3h
NADYM75	AAEL003270	Moyo-D	3h
NADZK17	DV411085	Moyo-D	3h
NADZO48	DV411471	Moyo-D	3h
NADZT51	DV412219	Moyo-D	3h
NADZW89	AAEL005938	Moyo-D	3h
NADZY28	DV412802	Moyo-D	3h
NAEA288	DV437581	Moyo-D	3h
NAAF550	AAEL004716	Moyo-D	3d

NAAF17	DV271726	Moyo-D	3d
NAAFQ80	AAEL006406	Moyo-D	3d
NAAFS49	DV271096	Moyo-D	3d
NAAFV20	AAEL003632	Moyo-D	3d
NAAFV47	AAEL003873	Moyo-D	3d
NAAG165	AAEL001412	Moyo-D	3d
NAAG242	DV283507	Moyo-D	3d
NAAG415	AAEL007010	Moyo-D	3d
NAAG690	DV284300	Moyo-D	3d
NAAGA24	AAEL009572	Moyo-D	3d
NAAGO54	AAEL001056	Moyo-D	3d
NAAGQ26	AAEL010308	Moyo-D	3d
NAAH226	DV279861	Moyo-D	3d
NAAH534	AAEL008892	Moyo-D	3d
NAAHC86	DV275893	Moyo-D	3d
NAAHF01	AAEL000206	Moyo-D	3d
NAAHM10	DV289565	Moyo-D	3d
NAAHM37	DV289544	Moyo-D	3d
NAAHM86	AAEL011306	Moyo-D	3d
NAAHN05	AAEL015151	Moyo-D	3d
NAAHN72	AAEL002811	Moyo-D	3d
NAAHQ16	DV290208	Moyo-D	3d
NAAI464	AAEL005742	Moyo-D	3d
NABMD71	DV292706	Moyo-D	3d
NABMO36	DV291039	Moyo-D	3d
NABMP23	DV291411	Moyo-D	3d
NABMZ69	AAEL010576	Moyo-D	3d
NABN138	AAEL001857	Moyo-D	3d
NABN202	AAEL013786	Moyo-D	3d
NABNK91	DV298207	Moyo-D	3d
NABNP31	AAEL004025	Moyo-D	3d
NABNS64	AAEL015330	Moyo-D	3d
NABNS81	AAEL001356	Moyo-D	3d
NABO838	DV317188	Moyo-D	3d
NABOE67	AAEL013012	Moyo-D	3d
NABOU12	AAEL002925	Moyo-D	3d
NABOZ57	DV313463	Moyo-D	3d
NABP240	DV310976	Moyo-D	3d
NABPB20	DV309314	Moyo-D	3d
NABPB91	AAEL010032	Moyo-D	3d
NABPE31	AAEL006656	Moyo-D	3d
NABPG08	AAEL002163	Moyo-D	3d
NABPK07	AAEL008804	Moyo-D	3d
NABQ608	AAEL011475	Moyo-D	3d
NABQ689	DV302915	Moyo-D	3d
NABR451	AAEL010165	Moyo-D	3d
NABR605	AAEL014729	Moyo-D	3d

NABRM56	DV322892	Moyo-D	3d
NABRT63	AAEL004371	Moyo-D	3d
NABRT91	AAEL010469	Moyo-D	3d
NABRU10	AAEL006640	Moyo-D	3d
NABRU54	AAEL006946	Moyo-D	3d
NABRV12	DV324841	Moyo-D	3d
NABRV63	DV324935	Moyo-D	3d
NABRW22	AAEL013210	Moyo-D	3d
NABRW48	DV325235	Moyo-D	3d
NABRY09	AAEL006316	Moyo-D	3d
NABRY24	AAEL000565	Moyo-D	3d
NABRY76	DV325870	Moyo-D	3d
NABS014	AAEL004972	Moyo-D	3d
NABS371	AAEL010234	Moyo-D	3d
NABS410	AAEL010347	Moyo-D	3d
NABS896	DV322845	Moyo-D	3d
NABSA92	DV332689	Moyo-D	3d
NABSB09	DV332735	Moyo-D	3d
NABSC15	DV332905	Moyo-D	3d
NABSV68	AAEL005921	Moyo-D	3d
NABSZ13	AAEL005160	Moyo-D	3d
NABTA60	DV327913	Moyo-D	3d
NABTJ92	AAEL002444	Moyo-D	3d
NABTK05	AAEL004791	Moyo-D	3d
NABTQ37	DV326289	Moyo-D	3d
NABTQ80	DV326692	Moyo-D	3d
NABU849	AAEL010933	Moyo-D	3d
NABUB85	DV341042	Moyo-D	3d
NABUG84	DV339129	Moyo-D	3d
NABUW64	AAEL009487	Moyo-D	3d
NABUZ76	DV335379	Moyo-D	3d
NABV806	DV336636	Moyo-D	3d
NABVF13	AAEL009173	Moyo-D	3d
NABW029	AAEL006477	Moyo-D	3d
NABW541	AAEL005364	Moyo-D	3d
NABWD62	AAEL006340	Moyo-D	3d
NABWN31	AAEL014365	Moyo-D	3d
NABWS05	DV346571	Moyo-D	3d
NABWU93	DV346988	Moyo-D	3d
NABWX34	DV343369	Moyo-D	3d
NABX288	AAEL000664	Moyo-D	3d
NABX405	AAEL001397	Moyo-D	3d
NABX413	DV353223	Moyo-D	3d
NABX788	AAEL000237	Moyo-D	3d
NABXC60	DV352178	Moyo-D	3d
NABXI03	DV352595	Moyo-D	3d
NABXO41	AAEL012435	Moyo-D	3d

NABXV52	DV350461	Moyo-D	3d
NABY450	AAEL011159	Moyo-D	3d
NABY475	AAEL004035	Moyo-D	3d
NABY571	AAEL013877	Moyo-D	3d
NABY882	AAEL003845	Moyo-D	3d
NABY910	AAEL003403	Moyo-D	3d
NABY986	AAEL001888	Moyo-D	3d
NABYC70	AAEL006610	Moyo-D	3d
NABZ427	AAEL005873	Moyo-D	3d
NABZA05	AAEL008467	Moyo-D	3d
NACA059	AAEL003909	Moyo-D	3d
NACA232	DV364104	Moyo-D	3d
NACA257	DV364158	Moyo-D	3d
NACA557	AAEL006010	Moyo-D	3d
NACA639	AAEL007446	Moyo-D	3d
NACA735	DV364871	Moyo-D	3d
NACA860	AAEL007461	Moyo-D	3d
NACAE73	AAEL014559	Moyo-D	3d
NACAH11	DV361925	Moyo-D	3d
NACAJ86	AAEL010821	Moyo-D	3d
NACAL70	AAEL006776	Moyo-D	3d
NACAT57	DV359875	Moyo-D	3d
NACAU46	AAEL003957	Moyo-D	3d
NACAV29	AAEL009393	Moyo-D	3d
NACB116	AAEL011727	Moyo-D	3d
NACB988	DV365517	Moyo-D	3d
NACBD58	AAEL009449	Moyo-D	3d
NACBE57	AAEL003184	Moyo-D	3d
NACBH12	DV367273	Moyo-D	3d
NACBK22	AAEL000388	Moyo-D	3d
NACBL80	AAEL011014	Moyo-D	3d
NACBM31	AAEL013921	Moyo-D	3d
NACM430	AAEL003698	Moyo-D	3d
NACMF21	AAEL009755	Moyo-D	3d
NADA155	DV388149	Moyo-D	3d
NADA706	AAEL011273	Moyo-D	3d
NADAH10	DV384124	Moyo-D	3d
NADAJ19	AAEL008228	Moyo-D	3d
NADAK12	AAEL010461	Moyo-D	3d
NADAL80	AAEL007771	Moyo-D	3d
NADB194	AAEL010332	Moyo-D	3d
NADB481	AAEL001166	Moyo-D	3d
NADBA43	AAEL008677	Moyo-D	3d
NADBG59	AAEL002435	Moyo-D	3d
NADBL57	AAEL007078	Moyo-D	3d
NADBN52	DV391158	Moyo-D	3d
NADBS39	DV391594	Moyo-D	3d

NADBV57	DV387618	Moyo-D	3d
NADC279	DV389881	Moyo-D	3d
NADC788	AAEL007839	Moyo-D	3d
NADC929	AAEL011734	Moyo-D	3d
NADCB61	DV386143	Moyo-D	3d
NADCP95	AAEL006952	Moyo-D	3d
NADCT36	AAEL009367	Moyo-D	3d
NADCX10	AAEL006573	Moyo-D	3d
NADD159	AAEL007034	Moyo-D	3d
NADD459	DV432743	Moyo-D	3d
NADDD50	DV431001	Moyo-D	3d
NADDL05	AAEL004828	Moyo-D	3d
NADDL18	DV432209	Moyo-D	3d
NADDU28	AAEL006745	Moyo-D	3d
NADDU71	AAEL011894	Moyo-D	3d
NADE576	AAEL003261	Moyo-D	3d
NADE946	AAEL012745	Moyo-D	3d
NADEE26	DV395730	Moyo-D	3d
NADEE37	AAEL005666	Moyo-D	3d
NADV020	AAEL006696	Moyo-D	3d
NADV128	AAEL006235	Moyo-D	3d
NADV178	DV405958	Moyo-D	3d
NADV185	DV405966	Moyo-D	3d
NADV346	DV406430	Moyo-D	3d
NADV374	AAEL008503	Moyo-D	3d
NADV406	AAEL008525	Moyo-D	3d
NADV412	AAEL012081	Moyo-D	3d
NADV622	DV407220	Moyo-D	3d
NADV907	DV399126	Moyo-D	3d
NADV949	AAEL012354	Moyo-D	3d
NADVB05	AAEL009457	Moyo-D	3d
NADVD33	DV400424	Moyo-D	3d
NADVD54	DV401113	Moyo-D	3d
NADVG96	DV402261	Moyo-D	3d
NADVH92	AAEL002874	Moyo-D	3d
NADVI22	DV402017	Moyo-D	3d
NADVJ47	DV403107	Moyo-D	3d
NADVJ55	AAEL004196	Moyo-D	3d
NADVJ73	AAEL012177	Moyo-D	3d
NADVL28	AAEL014147	Moyo-D	3d
NADVM11	AAEL008876	Moyo-D	3d
NADVN05	AAEL014739	Moyo-D	3d
NADVO02	DV404708	Moyo-D	3d
NADVO32	AAEL006803	Moyo-D	3d
NADVP18	DV403804	Moyo-D	3d
NADVP54	AAEL000411	Moyo-D	3d
NADVQ60	AAEL012117	Moyo-D	3d

NADVR06	AAEL003762	Moyo-D	3d
NADV09	AAEL013561	Moyo-D	3d
NADW321	DV401706	Moyo-D	3d
NADW326	AAEL006542	Moyo-D	3d
NADW623	DV414779	Moyo-D	3d
NADWA08	AAEL000763	Moyo-D	3d
NADWJ44	DV413647	Moyo-D	3d
NADWL33	DV411273	Moyo-D	3d
NADWL59	DV411404	Moyo-D	3d
NADWM07	DV411587	Moyo-D	3d
NADWM15	DV411606	Moyo-D	3d
NADWO12	AAEL009503	Moyo-D	3d
NADWQ57	AAEL012180	Moyo-D	3d
NADWY77	AAEL002254	Moyo-D	3d
NADX288	AAEL007895	Moyo-D	3d
NADX584	AAEL008723	Moyo-D	3d
NADX595	AAEL006978	Moyo-D	3d
NADXB48	AAEL007668	Moyo-D	3d
NADXC94	AAEL003269	Moyo-D	3d
NADXE65	DV425584	Moyo-D	3d
NADXG66	DV404744	Moyo-D	3d
NADXJ30	AAEL008849	Moyo-D	3d
NADXM69	AAEL004838	Moyo-D	3d
NADXM78	AAEL002809	Moyo-D	3d
NADXR09	AAEL007509	Moyo-D	3d
NADXT26	AAEL007251	Moyo-D	3d
NADXZ18	DV423010	Moyo-D	3d
NADY346	AAEL012019	Moyo-D	3d
NADY525	AAEL008281	Moyo-D	3d
NADY540	DV420883	Moyo-D	3d
NADY628	DV424473	Moyo-D	3d
NADY683	AAEL010178	Moyo-D	3d
NADY748	DV424618	Moyo-D	3d
NADY971	DV421615	Moyo-D	3d
NADYA46	DV425114	Moyo-D	3d
NADYC60	AAEL010317	Moyo-D	3d
NADYE72	AAEL003858	Moyo-D	3d
NADYH67	AAEL010523	Moyo-D	3d
NADYN54	DV417749	Moyo-D	3d
NADYP40	DV418103	Moyo-D	3d
NADYQ36	DV418234	Moyo-D	3d
NADYT66	AAEL011606	Moyo-D	3d
NADYV84	AAEL001498	Moyo-D	3d
NADYW52	AAEL003216	Moyo-D	3d
NADYZ94	AAEL009026	Moyo-D	3d
NADZ185	AAEL007114	Moyo-D	3d
NADZ304	DV417164	Moyo-D	3d

NADZ376	DV419980	Moyo-D	3d
NADZ553	DV420269	Moyo-D	3d
NADZ938	DV417712	Moyo-D	3d
NADZA56	AAEL011301	Moyo-D	3d
NADZC56	DV418275	Moyo-D	3d
NADZE15	DV418545	Moyo-D	3d
NADZE74	AAEL009212	Moyo-D	3d
NADZF57	AAEL002466	Moyo-D	3d
NADZF58	DV410457	Moyo-D	3d
NADZF83	AAEL002366	Moyo-D	3d
NADZG15	DV410548	Moyo-D	3d
NADZG44	AAEL001282	Moyo-D	3d
NADZH54	DV410714	Moyo-D	3d
NADZH79	AAEL005277	Moyo-D	3d
NADZN76	AAEL001024	Moyo-D	3d
NADZO42	AAEL000499	Moyo-D	3d
NADZP33	AAEL004960	Moyo-D	3d
NADZP45	DV417010	Moyo-D	3d
NADZQ74	AAEL011739	Moyo-D	3d
NADZR59	DV411951	Moyo-D	3d
NADZT91	AAEL001056	Moyo-D	3d
NADZU76	AAEL008650	Moyo-D	3d
NADZW45	AAEL005690	Moyo-D	3d
NADZX04	AAEL006697	Moyo-D	3d
NADZX29	AAEL006109	Moyo-D	3d
NADZZ76	AAEL003385	Moyo-D	3d
NAEA068	AAEL010330	Moyo-D	3d
NAEA268	DV437545	Moyo-D	3d
NAEA270	AAEL014932	Moyo-D	3d
NAEA280	AAEL002142	Moyo-D	3d
NAEA287	AAEL001155	Moyo-D	3d

Online Resource 3

cDNA ID VectroBase/Gen Up-regulated in strain and time

NAAG339	AAEL004688	D2S3 (3h) / D2S3 (3d)
NABNS60	AAEL007665	D2S3 (3h) / D2S3 (3d)
NABO015	AAEL008882	D2S3 (3h) / D2S3 (3d)
NABOO31	DV314545	D2S3 (3h) / D2S3 (3d)
NABSW88	DV329578	D2S3 (3h) / D2S3 (3d)
NABW234	DV347556	D2S3 (3h) / D2S3 (3d)
NADBI46	AAEL001447	D2S3 (3h) / D2S3 (3d)
NADX583	AAEL002406	D2S3 (3h) / D2S3 (3d)
NADXG16	DV404545	D2S3 (3h) / D2S3 (3d)
NABPM17	AAEL014931	D2S3 (3h) / Moyo-D (3d)
NABUF31	DV338929	D2S3 (3h) / Moyo-D (3d)
NABV642	AAEL009136	D2S3 (3h) / Moyo-D (3d)
NABXB63	AAEL011282	D2S3 (3h) / Moyo-D (3d)
NACMM30	DV373578	D2S3 (3h) / Moyo-D (3d)
NADV471	DV406570	D2S3 (3h) / Moyo-D (3d)
NADVR04	AAEL009937	D2S3 (3h) / Moyo-D (3d)
NADVS02	DV399919	D2S3 (3h) / Moyo-D (3d)
NADW335	AAEL007898	D2S3 (3h) / Moyo-D (3d)
NADYB68	DV421966	D2S3 (3h) / Moyo-D (3d)
NAAF043	AAEL002812	Moyo-D (3h) / D2S3 (3d)
NAAF155	AAEL005353	Moyo-D (3h) / D2S3 (3d)
NAAF618	AAEL007729	Moyo-D (3h) / D2S3 (3d)
NAAF704	AAEL005619	Moyo-D (3h) / D2S3 (3d)
NAAFR76	AAEL007149	Moyo-D (3h) / D2S3 (3d)
NAAHN61	DV289787	Moyo-D (3h) / D2S3 (3d)
NAAI837	AAEL014301	Moyo-D (3h) / D2S3 (3d)
NABN424	AAEL009498	Moyo-D (3h) / D2S3 (3d)
NABPH78	AAEL011751	Moyo-D (3h) / D2S3 (3d)
NABPK34	AAEL012161	Moyo-D (3h) / D2S3 (3d)
NABPZ85	DV300889	Moyo-D (3h) / D2S3 (3d)
NABQ221	DV301585	Moyo-D (3h) / D2S3 (3d)
NABQD71	DV304671	Moyo-D (3h) / D2S3 (3d)
NABS876	DV322772	Moyo-D (3h) / D2S3 (3d)
NABZE90	AAEL012888	Moyo-D (3h) / D2S3 (3d)
NACA394	DV364330	Moyo-D (3h) / D2S3 (3d)
NACBQ89	DV368881	Moyo-D (3h) / D2S3 (3d)
NADC183	DV389643	Moyo-D (3h) / D2S3 (3d)
NADC933	AAEL013133	Moyo-D (3h) / D2S3 (3d)
NADXB12	DV428072	Moyo-D (3h) / D2S3 (3d)
NABQB60	AAEL012847	Moyo-D (3h) / Moyo-D (3d)
NABRR29	DV323899	Moyo-D (3h) / Moyo-D (3d)
NABRW45	DV325268	Moyo-D (3h) / Moyo-D (3d)
NABSU33	DV332379	Moyo-D (3h) / Moyo-D (3d)
NABTC72	AAEL003068	Moyo-D (3h) / Moyo-D (3d)

NABWH28	DV345562	Moyo-D (3h) / Moyo-D (3d)
NABX839	AAEL007076	Moyo-D (3h) / Moyo-D (3d)
NACBQ80	AAEL001112	Moyo-D (3h) / Moyo-D (3d)
NADCE32	AAEL013402	Moyo-D (3h) / Moyo-D (3d)
NADD777	AAEL015631	Moyo-D (3h) / Moyo-D (3d)
NADDH56	DV431616	Moyo-D (3h) / Moyo-D (3d)
NADW380	DV401801	Moyo-D (3h) / Moyo-D (3d)
NADWT58	AAEL011870	Moyo-D (3h) / Moyo-D (3d)
NADXQ12	DV424447	Moyo-D (3h) / Moyo-D (3d)
NADYE59	AAEL003586	Moyo-D (3h) / Moyo-D (3d)

Online Resource 4

S3h	No. of genes R3h	No. of genes S3d	No. of genes R3d	No. of genes
ATP binding	13	18	12	11
binding	14	15	8	9
catalytic ac	18	15	15	10
integral to	9	16	8	14
intracellular	15	18	16	21
membrane	14	25	10	8
metabolic p	14	19	12	23
nucleotide	17	17	10	9
protein bin	37	23	27	25
zinc ion bin	14	42	13	9

Online Resource 5

Gene	Gene description (VectorBase)	Pathway(s) annotation (KEGG)	Expression pattern
AAEL003508	serine-pyruvate aminotransferase	Alanine, aspartate and glutamate metabolism, Glycine, serine and threonine metabolism, Peroxisome	Upregulated in Moyo-D after 3hr of infection
AAEL004042	conserved hypothetical protein	Amino sugar and nucleotide sugar metabolism	Upregulated in D2S3 after 3day of infection
AAEL006364	conserved hypothetical protein	Amino sugar and nucleotide sugar metabolism	Upregulated in D2S3 after 3day of infection
AAEL013877	Glucosamine-6-phosphate isomerase (EC 3.5.99.6)(Glucosamine-6-phosphate deaminase)(GlcN6P deaminase)(GNPDA)	Amino sugar and nucleotide sugar metabolism	Upregulated in Moyo-D after 3day of infection
AAEL007839	beta-hexosaminidase	Amino sugar and nucleotide sugar metabolism, Glycosaminoglycan degradation, Glycosphingolipid biosynthesis - globo series, Glycosphingolipid biosynthesis - ganglio series, Other glycan degradation, Lysosome	Upregulated in Moyo-D after 3day of infection
AAEL000388	isoleucyl tRNA synthetase	Aminoacyl-tRNA biosynthesis	Upregulated in Moyo-D after 3day of infection
AAEL007038	prolyl 4-hydroxylase alpha subunit 1,	Arginine and proline metabolism	Upregulated in Moyo-D after 3hr of infection
AAEL009185	arginine or creatine kinase	Arginine and proline metabolism	Upregulated in D2S3 after 3day of

			infection
AAEL005742	transcription initiation factor TFIID subunit 10, putative	Basal transcription factors	Upregulated in Moyo-D after 3day of infection
AAEL000404	DNA repair helicase rad3/xp-d	Basal transcription factors, Nucleotide excision repair	Upregulated in Moyo-D after 3hr of infection
AAEL011380	high mobility group B1, putative	Base excision repair	Upregulated in Moyo-D after 3hr of infection
AAEL008216	aconitase	Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism	Upregulated in D2S3 after 3hr of infection
AAEL010330	succinate dehydrogenase	Citrate cycle (TCA cycle), Oxidative phosphorylation	Upregulated in Moyo-D after 3day of infection
AAEL006833	succinyl-CoA synthetase small subunit, putative	Citrate cycle (TCA cycle), Propanoate metabolism	Upregulated in Moyo-D after 3hr of infection
AAEL011746	succinyl-coa synthetase beta chain	Citrate cycle (TCA cycle), Propanoate metabolism	Upregulated in D2S3 after 3day of infection
AAEL011830	Probable methylthioribulose-1-phosphate dehydratase (MTRu-1-P dehydratase)(EC 4.2.1.109)	Cysteine and methionine metabolism	Upregulated in Moyo-D after 3hr of infection
AAEL001378	spermine synthase	Cysteine and methionine metabolism, Arginine and proline metabolism, beta-Alanine metabolism, Glutathione metabolism	Upregulated in D2S3 after 3hr of infection
AAEL012546	DNA replication licensing factor MCM6	DNA replication	Upregulated in Moyo-D after 3hr of infection
AAEL006223	replication factor C, 37kD-subunit, putative	DNA replication, Nucleotide excision repair, Mismatch repair	Upregulated in D2S3 after 3day of infection
AAEL004688	conserved hypothetical protein	Dorso-ventral axis formation	Upregulated in D2S3 after 3hr of infection

AAEL005386	collagen alpha chain, anopheles	ECM-receptor interaction	Upregulated in Moyo-D after 3hr of infection
AAEL013147	hypothetical protein	ECM-receptor interaction	Upregulated in Moyo-D after 3hr of infection
AAEL001698	charged multivesicular body protein 4b	Endocytosis	Upregulated in Moyo-D after 3hr of infection
AAEL002469	endophilin a,	Endocytosis	Upregulated in D2S3 after 3day of infection
AAEL006776	blastoderm specific protein 25D, putative	Endocytosis	Upregulated in Moyo-D after 3day of infection
AAEL007288	dynamamin	Endocytosis	Upregulated in D2S3 after 3hr of infection
AAEL007509	neuroendocrine differentiation factor	Endocytosis	Upregulated in Moyo-D after 3day of infection
AAEL008184	conserved hypothetical protein	Endocytosis	Upregulated in D2S3 after 3hr of infection
AAEL009754	endophilin b	Endocytosis	Upregulated in D2S3 after 3hr of infection
AAEL007845	rab5	Endocytosis, Phagosome	Upregulated in D2S3 after 3day of infection
AAEL001235	palmitoyl-protein thioesterase	Fatty acid elongation, Lysosome	Upregulated in D2S3 after 3hr of infection
AAEL007536	carnitine o-acyltransferase	Fatty acid metabolism	Upregulated in D2S3 after 3day of infection
AAEL006836	dihydropteridine reductase	Folate biosynthesis	Upregulated in D2S3 after 3day of infection
AAEL006316	ketohexokinase	Fructose and mannose metabolism	Upregulated in Moyo-D after 3day of infection
AAEL014958	galactokinase	Galactose metabolism, Amino sugar and nucleotide sugar	Upregulated in D2S3 after 3hr of infection

		metabolism	
AAEL006239	glycerol kinase	Glycerolipid metabolism	Upregulated in D2S3 after 3hr of infection
AAEL007322	phosphatidate phosphatase	Glycerolipid metabolism, Glycerophospholipid metabolism, Ether lipid metabolism, Sphingolipid metabolism	Upregulated in D2S3 after 3day of infection
AAEL003873	glycerol-3-phosphate dehydrogenase	Glycerophospholipid metabolism	Upregulated in Moyo-D after 3day of infection
AAEL006667	phosphatidyltransferase	Glycerophospholipid metabolism, Ether lipid metabolism	Upregulated in D2S3 after 3day of infection
AAEL008467	cysteine synthase	Glycine, serine and threonine metabolism, Cysteine and methionine metabolism	Upregulated in Moyo-D after 3day of infection
AAEL013613	pyruvate dehydrogenase	Glycolysis / Gluconeogenesis, Citrate cycle (TCA cycle), Pyruvate metabolism, Butanoate metabolism, Valine, leucine and isoleucine biosynthesis	Upregulated in D2S3 after 3hr of infection
AAEL015010	acetyl-coa synthetase	Glycolysis / Gluconeogenesis, Pyruvate metabolism, Propanoate metabolism	Upregulated in D2S3 after 3hr of infection
AAEL014913	pyruvate kinase	Glycolysis / Gluconeogenesis, Pyruvate metabolism, Purine metabolism	Upregulated in D2S3 after 3hr of infection

AAEL007895	beta-1,4-galactosyltransferase	Glycosaminoglycan biosynthesis - chondroitin sulfate, Glycosaminoglycan biosynthesis - heparan sulfate	Upregulated in Moyo-D after 3day of infection
AAEL005460	alpha-galactosidase/alpha-n-acetylgalactosaminidase	Glycosphingolipid biosynthesis - globo series, Lysosome	Upregulated in D2S3 after 3day of infection
AAEL004351	casein kinase	Hedgehog signaling pathway	Upregulated in D2S3 after 3hr of infection
AAEL011993	conserved hypothetical protein	Homologous recombination, Fanconi anemia pathway	Upregulated in D2S3 after 3hr of infection
AAEL003143	inositol polyphosphate 5-phosphatase	Inositol phosphate metabolism, Phosphatidylinositol signaling system	Upregulated in Moyo-D after 3hr of infection
AAEL009294	phosphatidylinositol 4-kinase	Inositol phosphate metabolism, Phosphatidylinositol signaling system	Upregulated in Moyo-D after 3hr of infection
AAEL000193	histone-lysine n-methyltransferase	Lysine degradation	Upregulated in D2S3 after 3day of infection
AAEL010414	set domain protein	Lysine degradation	Upregulated in D2S3 after 3hr of infection
AAEL005364	adaptin, alpha/gamma/epsilon	Lysosome	Upregulated in Moyo-D after 3day of infection
AAEL010469	conserved hypothetical protein	MAPK signaling pathway - fly	Upregulated in Moyo-D after 3day of infection
AAEL003845	Ets domain-containing protein	MAPK signaling pathway - fly, Dorso-ventral axis formation	Upregulated in Moyo-D after 3day of infection
AAEL004319	epidermal growth factor receptor	MAPK signaling pathway - fly, Endocytosis, Dorso-ventral axis formation	Upregulated in D2S3 after 3hr of infection

AAEL013786	growth factor receptor-bound protein	MAPK signaling pathway - fly, Jak-STAT signaling pathway, Dorso-ventral axis formation	Upregulated in Moyo-D after 3day of infection
AAEL011780	DNA mismatch repair protein muts	Mismatch repair	Upregulated in D2S3 after 3hr of infection
AAEL007854	pelota	mRNA surveillance pathway	Upregulated in D2S3 after 3hr of infection
AAEL009887	WD-repeat protein	mRNA surveillance pathway	Upregulated in D2S3 after 3day of infection
AAEL010940	hypothetical protein	mRNA surveillance pathway	Upregulated in Moyo-D after 3hr of infection
AAEL011742	eukaryotic peptide chain release factor subunit	mRNA surveillance pathway	Upregulated in Moyo-D after 3hr of infection
AAEL014042	protein phosphatase pp2a regulatory subunit b	mRNA surveillance pathway	Upregulated in D2S3 after 3hr of infection
AAEL008179	RAS homologue enriched in brain (RHEB)	mTOR signaling pathway	Upregulated in D2S3 after 3hr of infection
AAEL008085	trypsin	Neuroactive ligand-receptor interaction	Upregulated in D2S3 after 3day of infection
AAEL008587	glutamate receptor, ionotropic, N-methyl d-aspartate	Neuroactive ligand-receptor interaction	Upregulated in D2S3 after 3day of infection
AAEL000451	beta1,4 mannosyltransferase	N-Glycan biosynthesis	Upregulated in D2S3 after 3hr of infection
AAEL015631	asparagine synthetase	Nitrogen metabolism, Alanine, aspartate and glutamate metabolism	Upregulated in Moyo-D after 3hr of infection
AAEL001887	glutamine synthetase 1, 2 (glutamate-amonia ligase) (gs)	Nitrogen metabolism, Alanine, aspartate and glutamate metabolism,	Upregulated in Moyo-D after 3hr of infection

		Arginine and proline metabolism	
AAEL010276	aminomethyltransferase	Nitrogen metabolism, Glycine, serine and threonine metabolism, One carbon pool by folate	Upregulated in Moyo-D after 3hr of infection
AAEL002389	gamma-secretase subunit aph-1	Notch signaling pathway	Upregulated in D2S3 after 3hr of infection
AAEL004586	histone deacetylase	Notch signaling pathway	Upregulated in Moyo-D after 3hr of infection
AAEL006085	methylenetetrahydrofolate dehydrogenase	One carbon pool by folate	Upregulated in Moyo-D after 3hr of infection
AAEL011072	conserved hypothetical protein	Other types of O-glycan biosynthesis	Upregulated in Moyo-D after 3hr of infection
AAEL002881	NADH:ubiquinone dehydrogenase, putative	Oxidative phosphorylation	Upregulated in D2S3 after 3hr of infection
AAEL008848	ATP synthase gamma subunit	Oxidative phosphorylation	Upregulated in Moyo-D after 3hr of infection
AAEL011871	cytochrome C1	Oxidative phosphorylation	Upregulated in Moyo-D after 3hr of infection
AAEL012740	ATPase subunit, putative	Oxidative phosphorylation	Upregulated in D2S3 after 3hr of infection
AAEL013009	cytochrome c oxidase subunit iv	Oxidative phosphorylation	Upregulated in Moyo-D after 3hr of infection
AAEL007777	vacuolar ATP synthase subunit S1	Oxidative phosphorylation, Phagosome, Lysosome	Upregulated in Moyo-D after 3hr of infection
AAEL001804	glucosyl/glucuronosyl transferases	Pentose and glucuronate interconversions, Ascorbate and aldarate metabolism, Starch	Upregulated in Moyo-D after 3hr of infection

		and sucrose metabolism, Other types of O-glycan biosynthesis, Retinol metabolism, Porphyrin and chlorophyll metabolism, Metabolism of xenobiotics by cytochrome P450, Drug metabolism - cytochrome P450, Drug metabolism - other enzymes	
AAEL002723	peroxisomal membrane protein pmp34	Peroxisome	Upregulated in D2S3 after 3hr of infection
AAEL009112	conserved hypothetical protein	Peroxisome	Upregulated in D2S3 after 3hr of infection
AAEL010461	conserved hypothetical protein	Peroxisome	Upregulated in Moyo-D after 3day of infection
AAEL013260	alpha methylacyl-coa racemase	Peroxisome	Upregulated in D2S3 after 3day of infection
AAEL003762	Protoporphyrinogen IX oxidase, putative	Porphyrin and chlorophyll metabolism	Upregulated in Moyo-D after 3day of infection
AAEL000672	cyclin a	Progesterone-mediated oocyte maturation	Upregulated in Moyo-D after 3hr of infection
AAEL008379	P38 mapk	Progesterone-mediated oocyte maturation	Upregulated in D2S3 after 3day of infection
AAEL009572	cyclin B3	Progesterone-mediated oocyte maturation	Upregulated in Moyo-D after 3day of infection
AAEL004563	26S protease regulatory subunit S10b	Proteasome	Upregulated in Moyo-D after 3hr of infection
AAEL006061	proteasome subunit alpha type	Proteasome	Upregulated in D2S3 after 3day of infection

AAEL012943	26S protease regulatory subunit	Proteasome	Upregulated in D2S3 after 3hr of infection
AAEL014915	26S proteasome subunit	Proteasome	Upregulated in D2S3 after 3hr of infection
AAEL001516	vesicle associated protein, putative	Protein processing in endoplasmic reticulum	Upregulated in Moyo-D after 3hr of infection
AAEL003939	eukaryotic translation initiation factor 2-alpha kinase 3 (pancreatic eif2-alpha kinase)	Protein processing in endoplasmic reticulum	Upregulated in D2S3 after 3day of infection
AAEL010032	translocon-associated protein, beta subunit precursor (trap-beta) (signal sequence receptor beta subunit)	Protein processing in endoplasmic reticulum	Upregulated in Moyo-D after 3day of infection
AAEL010798	ubiquitin-conjugating enzyme E2 g	Protein processing in endoplasmic reticulum, Ubiquitin mediated proteolysis	Upregulated in Moyo-D after 3hr of infection
AAEL005384	phosphoribosylformylglycinamide synthase, putative	Purine metabolism	Upregulated in D2S3 after 3hr of infection
AAEL006806	atrial natriuretic peptide receptor	Purine metabolism	Upregulated in D2S3 after 3hr of infection
AAEL014012	membrane-associated guanylate kinase (maguk)	Purine metabolism	Upregulated in D2S3 after 3hr of infection
AAEL004107	nucleoside diphosphate kinase, putative	Purine metabolism, Pyrimidine metabolism	Upregulated in D2S3 after 3day of infection
AAEL006661	histone acetyltransferase, putative	Purine metabolism, Pyrimidine metabolism, RNA polymerase	Upregulated in Moyo-D after 3hr of infection
AAEL011273	uridine cytidine kinase i	Pyrimidine metabolism, Drug metabolism - other enzymes	Upregulated in Moyo-D after 3day of infection
AAEL002286	autophagy related gene	Regulation of autophagy	Upregulated in D2S3 after 3day of infection
AAEL003165	low molecular weight protein-tyrosine-phosphatase	Riboflavin metabolism	Upregulated in D2S3 after 3day of

			infection
AAEL015151	acid phosphatase	Riboflavin metabolism	Upregulated in Moyo-D after 3day of infection
AAEL000010	ribosomal protein L36, putative	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL005629	ribosomal protein L35, putative	Ribosome	Upregulated in D2S3 after 3hr of infection
AAEL005901	40S ribosomal protein S3a	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL007771	60S ribosomal protein L22	Ribosome	Upregulated in Moyo-D after 3day of infection
AAEL008188	60S ribosomal protein L6	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL010299	40S ribosomal protein S12	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL010821	60S acidic ribosomal protein P0	Ribosome	Upregulated in Moyo-D after 3day of infection
AAEL011656	40S ribosomal protein S15	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL012686	ribosomal protein S12, putative	Ribosome	Upregulated in Moyo-D after 3hr of infection
AAEL013221	60S ribosomal protein L10a	Ribosome	Upregulated in D2S3 after 3day of infection
AAEL000422	U3 small nucleolar RNA-associated protein homolog, putative	Ribosome biogenesis in eukaryotes	Upregulated in D2S3 after 3day of infection
AAEL006469	conserved hypothetical protein	Ribosome biogenesis in eukaryotes	Upregulated in Moyo-D after 3hr of infection
AAEL006610	conserved hypothetical protein	Ribosome biogenesis in eukaryotes	Upregulated in Moyo-D after 3day of infection
AAEL008592	ribonuclease iii	Ribosome biogenesis in eukaryotes	Upregulated in Moyo-D after 3hr of infection

AAEL008865	oligoribonuclease, mitochondrial	Ribosome biogenesis in eukaryotes	Upregulated in Moyo-D after 3hr of infection
AAEL000262	conserved hypothetical protein	RNA degradation	Upregulated in D2S3 after 3hr of infection
AAEL005564	ubiquitin specific protease 52 / poly(A) ribonuclease subunit pan2	RNA degradation	Upregulated in D2S3 after 3hr of infection
AAEL006697	conserved hypothetical protein	RNA degradation	Upregulated in Moyo-D after 3day of infection
AAEL012874	rrp4	RNA degradation	Upregulated in Moyo-D after 3hr of infection
AAEL002334	Eukaryotic translation initiation factor 3 subunit E (eIF3e)(Eukaryotic translation initiation factor 3 subunit 6)	RNA transport	Upregulated in D2S3 after 3day of infection
AAEL004378	eukaryotic translation initiation factor 1A (eIF-1A)	RNA transport	Upregulated in Moyo-D after 3hr of infection
AAEL005635	nucleoporin	RNA transport	Upregulated in Moyo-D after 3hr of infection
AAEL007078	Eukaryotic translation initiation factor 3 subunit A (eIF3a)(Eukaryotic translation initiation factor 3 subunit 10)	RNA transport	Upregulated in Moyo-D after 3day of infection
AAEL008557	conserved hypothetical protein	RNA transport	Upregulated in D2S3 after 3day of infection
AAEL009101	Eukaryotic translation initiation factor 3 subunit F (eIF3f)(Eukaryotic translation initiation factor 3 subunit 5)	RNA transport	Upregulated in D2S3 after 3day of infection
AAEL009399	conserved hypothetical protein	RNA transport	Upregulated in D2S3 after 3hr of infection
AAEL014388	conserved hypothetical protein	RNA transport	Upregulated in D2S3 after 3hr of infection
AAEL014733	nuclear pore complex protein nup214	RNA transport	Upregulated in Moyo-D after 3hr of infection
AAEL010598	conserved hypothetical protein	RNA transport,	Upregulated in

		mRNA surveillance pathway	D2S3 after 3hr of infection
AAEL011817	nonsense-mediated mRNA decay protein 1 (rent1)	RNA transport, mRNA surveillance pathway	Upregulated in Moyo-D after 3hr of infection
AAEL010318	polyadenylate-binding protein	RNA transport, mRNA surveillance pathway, RNA degradation	Upregulated in D2S3 after 3hr of infection
AAEL009646	conserved hypothetical protein	RNA transport, mTOR signaling pathway	Upregulated in Moyo-D after 3hr of infection
AAEL008849	selenophosphate synthase	Selenocompound metabolism	Upregulated in Moyo-D after 3day of infection
AAEL014321	glucosylceramidase	Sphingolipid metabolism, Other glycan degradation, Lysosome	Upregulated in Moyo-D after 3hr of infection
AAEL011233	SM protein G, putative	Spliceosome	Upregulated in Moyo-D after 3hr of infection
AAEL005355	small nuclear ribonucleoprotein sm	Spliceosome, RNA degradation	Upregulated in Moyo-D after 3hr of infection
AAEL015199	WD-repeat protein	Spliceosome, Ubiquitin mediated proteolysis	Upregulated in Moyo-D after 3hr of infection
AAEL012297	sterol desaturase	Steroid biosynthesis	Upregulated in Moyo-D after 3hr of infection
AAEL009221	conserved hypothetical protein	Taurine and hypotaurine metabolism	Upregulated in Moyo-D after 3hr of infection
AAEL009110	smad anchor for receptor activation	TGF-beta signaling pathway, Endocytosis	Upregulated in Moyo-D after 3hr of infection
AAEL004435	kynurenine aminotransferase	Tryptophan metabolism, Selenocompound metabolism	Upregulated in D2S3 after 3day of infection
AAEL000758	ubiquitin-activating enzyme E1	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3hr of

			infection
AAEL004121	ubiquitin-conjugating enzyme E2 q	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3hr of infection
AAEL005820	hect E3 ubiquitin ligase	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3hr of infection
AAEL006291	cullin	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3day of infection
AAEL009026	ubiquitin-conjugating enzyme m	Ubiquitin mediated proteolysis	Upregulated in Moyo-D after 3day of infection
AAEL009074	Inhibitor of Apoptosis (IAP) containing Baculoviral IAP Repeat(s) (BIR domains).	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3day of infection
AAEL012435	tripartite motif protein	Ubiquitin mediated proteolysis	Upregulated in Moyo-D after 3day of infection
AAEL013633	ubiquitin-conjugating enzyme h	Ubiquitin mediated proteolysis	Upregulated in D2S3 after 3hr of infection
AAEL009324	hydroxyacyl dehydrogenase	Valine, leucine and isoleucine degradation	Upregulated in D2S3 after 3hr of infection

Online Resource 6

cDNA ID	VectorBase Gene ID (or GenBank Accession)	D2S3/ MoyoD	Moyo-S /Moyo-D	Gene Description
NAAF116	DV277747	0.522403	0.322403	unknown
NAAGW30	AAEL009819	2.18781	2.50781	hypothetical protein
NAAHL45	AAEL007125	1.277813	1.597813	PET117 polypeptide, putative
NABQD57	DV304640	0.347623	0.147623	unknown
NABQF83	AAEL005564	0.740672	0.540672	ubiquitin specific protease 52 / poly(A) ribonuclease subunit pan2
NABRR40	DV323917	0.734242	0.534242	unknown
NABRT95	AAEL011830	1.047919	1.367919	methylthioribulose-1-phosphate dehydratase (MTRu-1-P dehydratase)
NABXE43	AAEL009112	0.993698	0.793698	conserved hypothetical protein
NACA981	AAEL009082	1.480306	1.280306	hypothetical protein
NACM149	DV374880	0.11598	0.08402	unknown
NADAE29	AAEL012686	0.135158	0.455158	ribosomal protein S12, putative
NADBC39	AAEL013874	0.561524	0.881524	hypothetical protein
NADD620	AAEL010299	1.468426	1.268426	40S ribosomal protein S12
NAAF122	AAEL011103	1.437688	1.237688	centromere/kinetochore protein zw10
NAAHI08	AAEL012816	0.951082	0.751082	conserved hypothetical protein
NABM742	DV298463	1.164715	1.484715	unknown
NABNS81	AAEL001356	0.561427	0.361427	RNA-binding protein
NABOA70	AAEL007973	0.201336	0.001336	hypothetical protein
NABOL89	AAEL006667	1.549896	1.349896	phosphatidyltransferase
NACAF29	AAEL012064	1.217489	1.537489	Niemann-Pick Type C-2, putative
NADCX10	AAEL006573	2.232261	2.552261	conserved hypothetical protein
NAAF530	AAEL015014	0.353806	0.153806	conserved hypothetical protein
NABMY53	AAEL009529	1.043885	0.843885	hypothetical protein
NABQ789	AAEL012143	0.209165	0.009165	Caspase (Short).
NABQD40	AAEL011993	0.576366	0.896366	conserved hypothetical protein
NABRM26	AAEL007767	1.414915	1.214915	Protein kintoun
NABS645	AAEL011399	0.762057	0.562057	conserved hypothetical protein
NABW385	DV347817	0.10302	0.09698	unknown
NABW481	DV347970	0.775778	1.095778	unknown
NABW889	AAEL011387	0.37378	0.69378	leucine-rich repeat
NABZE01	AAEL008184	0.868202	0.668202	conserved hypothetical protein
NACAC05	DV360301	1.431155	1.231155	unknown
NACBB07	AAEL011288	1.445112	1.245112	elongation factor 1 gamma
NACBT40	AAEL004586	1.280655	1.600655	histone deacetylase

NACM460	DV375386	0.666234	0.466234	unknown
NADB255	DV393840	1.111922	0.911922	unknown
NADCC48	DV435783	0.732964	0.532964	unknown
NADCE32	AAEL013402	0.485654	0.805654	hypothetical protein
NADCU87	AAEL000828	1.545139	1.865139	vitellogenin,, putative
NADCY19	AAEL001906	0.118966	0.08103	pnuts protein
NADDS01	AAEL011305	1.076682	0.876682	hypothetical protein
NADE131	AAEL004938	1.585403	1.385403	hypothetical protein
NAAF529	AAEL000193	0.580811	0.900811	histone-lysine n-methyltransferase
NAAF715	AAEL007322	0.637243	0.437243	phosphatidate phosphatase
NAAHC86	DV275893	0.012374	0.187626	unknown
NAAI753	AAEL003939	0.958148	0.758148	eukaryotic translation initiation factor 2- alpha kinase 3 (pancreatic eif2-alpha kinase)
NABMV71	DV305971	1.222135	1.542135	unknown
NABQ611	AAEL002286	0.333564	0.653564	autophagy related gene
NABUG84	DV339129	0.387909	0.187909	unknown
NABW840	AAEL010674	0.544602	0.344602	hypothetical protein
NACA257	DV364158	0.823104	0.623104	unknown
NACM430	AAEL003698	1.704807	2.024807	conserved hypothetical protein