

ID	Most likely Location	Gene name	Scaffold	start position	end position	sense/antisense strand	Number of Amino Acid	Molecular Weight	Theoretical pI	Instability Index	Aliphatic Index	Grand Average of Hydropathicity
VaccDscff46-processed-gene-99.16-mRNA-1	Nuclear	VcLBD11a	VaccDscff43	17579233	17579748	+	129	14474.19	4.25	61.7	65.89	-0.516
VaccDscff47-processed-gene-81.24-mRNA-1	Nuclear	VcLBD11b	VaccDscff46	9915614	9916615	-	143	16371.41	4.63	53.53	69.65	-0.548
VaccDscff22-augustus-gene-266.27-mRNA-1	Nuclear	VcLBD11c	VaccDscff22	26640148	26642273	-	205	22519.41	5.13	73.6	64.34	-0.416
VaccDscff43-augustus-gene-120.26-mRNA-1	Nuclear	VcLBD11d	VaccDscff41	2912271	2913164	+	207	22830.67	5.29	72.08	61.84	-0.488
VaccDscff19-augustus-gene-366.31-mRNA-1	Nuclear	VcLBD12a	VaccDscff19	36685785	36686816	+	192	21093.07	6.98	54.48	79.27	-0.137
VaccDscff24-augustus-gene-66.43-mRNA-1	Nuclear	VcLBD12b	VaccDscff24	6190367	6192312	+	185	20240.04	6.27	54.86	78.05	-0.166
VaccDscff11-augustus-gene-319.21-mRNA-1	Nuclear	VcLBD12c	VaccDscff11	31950617	31951637	-	185	20085.82	6.8	53.81	75.95	-0.157
VaccDscff15-augustus-gene-307.19-mRNA-1	Nuclear	VcLBD12d	VaccDscff15	30761828	30763400	-	185	20138.88	5.87	52.02	75.95	-0.176
VaccDscff28-augustus-gene-319.25-mRNA-1	Nuclear	VcLBD12e	VaccDscff27	25934288	25936941	-	181	20120.07	6.17	45.5	81.93	-0.151
VaccDscff214-augustus-gene-0.26-mRNA-1	Nuclear	VcLBD12f	VaccDscff214	65365	73195	+	470	52972.86	4.95	62.29	69.51	-0.505
VaccDscff19-augustus-gene-37.43-mRNA-1	Nuclear	VcLBD12g	VaccDscff19	3700394	3701396	-	204	22746.16	6.28	49.32	87.94	-0.09
VaccDscff20-snap-gene-36.38-mRNA-1	Nuclear	VcLBD12h	VaccDscff20	3678481	3679471	-	181	20178.03	5.91	43.6	81.38	-0.204
VaccDscff26-augustus-gene-123.41-mRNA-1	Nuclear	VcLBD12i	VaccDscff25	29733419	29735048	-	169	18682.37	6.88	55.87	83.08	-0.18
VaccDscff33-snap-gene-217.28-mRNA-1	Nuclear	VcLBD12j	VaccDscff32	23670136	23674909	-	243	26992.06	8.38	47.8	94.69	-0.005
VaccDscff19-augustus-gene-33.32-mRNA-1	Nuclear	VcLBD13a	VaccDscff19	3378333	3379599	+	236	26385.3	7.64	57.27	79.79	-0.2
VaccDscff28-augustus-gene-322.39-mRNA-1	Nuclear	VcLBD13b	VaccDscff28	31934016	31935131	+	252	27999.05	7.66	55.33	79.01	-0.194
VaccDscff20-snap-gene-35.50-mRNA-1	Nuclear	VcLBD13c	VaccDscff20	3491678	3493339	+	232	25612.32	8.78	62.42	72.8	-0.289
VaccDscff48-augustus-gene-81.38-mRNA-1	Nuclear	VcLBD13d	VaccDscff47	16510092	16531435	-	324	36285.12	9.07	57.77	68.4	-0.488
VaccDscff4-processed-gene-374.17-mRNA-1	Extracellular	VcLBD13e	VaccDscff4	36328960	36330626	+	276	30368.74	8.01	43.4	73.88	-0.218
VaccDscff36-processed-gene-55.18-mRNA-1	Nuclear	VcLBD13f	VaccDscff2	30285305	30286767	-	221	24741.78	9.84	71.85	86.92	-0.282
VaccDscff9-processed-gene-353.12-mRNA-1	Nuclear	VcLBD13g	VaccDscff4	37411377	37416933	+	66	7180.45	9.44	73.4	72.58	0.105
VaccDscff43-processed-gene-35.4-mRNA-1	Nuclear	VcLBD14a	VaccDscff43	3551122	3551922	-	236	25899.71	5.95	47.27	62.5	-0.444
VaccDscff22-processed-gene-337.6-mRNA-1	Nuclear	VcLBD14b	VaccDscff22	33770366	33771166	+	236	25875.71	6.04	46.83	62.08	-0.44

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VaccDscff46-processed-gene-173.1-mRNA-1	Nuclear	VcLBD14c	VaccDscff46	17308084	17308884	+	236	25915.76	5.95	48.93	62.5	-0.42
VaccDscff43-augustus-gene-35.18-mRNA-1	Nuclear	VcLBD14d	VaccDscff43	12024855	12026712	+	235	25927.86	6.29	47.36	61.91	-0.411
VaccDscff46-augustus-gene-173.19-mRNA-1	Nuclear	VcLBD14e	VaccDscff44	22827760	22830232	+	233	25811.78	5.71	53.01	62.45	-0.385
VaccDscff22-processed-gene-338.1-mRNA-1	Nuclear	VcLBD14f	VaccDscff22	33791225	33792018	+	233	25780.75	6.2	51.48	62.88	-0.395
VaccDscff47-processed-gene-165.0-mRNA-1	Nuclear	VcLBD14g	VaccDscff47	16490213	16491006	+	233	25829.78	5.8	53	62.88	-0.409
VaccDscff43-snap-gene-90.31-mRNA-1	Nuclear	VcLBD15a	VaccDscff43	7790230	7800104	+	392	42514.12	9.64	76.52	64.21	-0.51
VaccDscff43-snap-gene-78.27-mRNA-1	Nuclear	VcLBD15b	VaccDscff43	3486856	3508162	+	391	42427.04	9.64	76.19	64.37	-0.51
VaccDscff22-snap-gene-299.44-mRNA-1	Nuclear	VcLBD15c	VaccDscff22	29967840	29978307	-	391	42414.99	9.64	75.7	63.38	-0.523
VaccDscff47-snap-gene-122.46-mRNA-1	Nuclear	VcLBD15d	VaccDscff46	17341759	17344136	-	391	42417	9.64	76.88	64.37	-0.508
VaccDscff47-snap-gene-165.31-mRNA-1	Nuclear	VcLBD16a	VaccDscff47	12215848	12225744	-	1216	136348.65	8.73	45.69	76.76	-0.478
VaccDscff46-augustus-gene-173.21-mRNA-1	Nuclear	VcLBD16b	VaccDscff46	17328864	17329796	+	201	21988.44	7.5	59.77	80.65	-0.001
VaccDscff22-snap-gene-338.36-mRNA-1	Nuclear	VcLBD16c	VaccDscff22	33804190	33824629	-	1180	131836.22	8.54	45.19	76.87	-0.484
VaccDscff43-snap-gene-35.20-mRNA-1	Nuclear	VcLBD16d	VaccDscff43	3520485	3521293	-	1180	131956.46	8.65	44.98	77.03	-0.483
VaccDscff11-processed-gene-370.2-mRNA-1	Nuclear	VcLBD16e	VaccDscff11	37005016	37007208	-	210	22970.19	7.55	47.12	69.81	-0.195
VaccDscff15-processed-gene-362.10-mRNA-1	Nuclear	VcLBD16f	VaccDscff15	36256901	36259115	-	210	22944.15	7.55	46.34	70.29	-0.179
VaccDscff24-processed-gene-33.4-mRNA-1	Extracellular	VcLBD16g	VaccDscff24	3309045	3312666	-	325	34525.71	7.03	53.08	58.98	-0.375
VaccDscff22-augustus-gene-36.36-mRNA-1	Nuclear	VcLBD18a	VaccDscff22	3660594	3667321	-	252	25971.66	7.15	68.46	78.25	-0.057
VaccDscff684-augustus-gene-0.6-mRNA-1	Nuclear	VcLBD18b	VaccDscff62	487579	491309	-	248	25713.43	7.15	68.41	79.52	-0.05
VaccDscff41-augustus-gene-159.30-mRNA-1	Nuclear	VcLBD19a	VaccDscff40	4041717	4042335	+	194	21047.87	8.31	64.42	70.98	-0.24
VaccDscff40-snap-gene-170.39-mRNA-1	Nuclear	VcLBD19b	VaccDscff40	3982190	3983249	-	197	21349.22	7.03	66.47	74.87	-0.168
VaccDscff23-augustus-gene-122.27-mRNA-1	Nuclear	VcLBD19c	VaccDscff23	12235676	12241039	-	197	21357.29	7.03	67.94	75.84	-0.135
VaccDscff23-augustus-gene-125.22-mRNA-1	Nuclear	VcLBD19d	VaccDscff23	12495518	12501411	+	197	21421.31	7.03	67.7	76.35	-0.152
VaccDscff15-augustus-gene-291.38-mRNA-1	Nuclear	VcLBD1a	VaccDscff15	29184442	29187359	-	195	21101.99	5.49	67	82.15	-0.122
VaccDscff24-augustus-gene-95.27-mRNA-1	Nuclear	VcLBD1b	VaccDscff24	6600684	6601689	-	195	21114.04	5.49	67.38	84.15	-0.095

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VaccDscf19-snap-gene-337.60-mRNA-1	Nuclear	VcLBD1c	VaccDscf19	33776068	33780044	-	158	17530.07	5.1	55.14	86.58	-0.152
VaccDscf26-augustus-gene-295.37-mRNA-1	Nuclear	VcLBD20a	VaccDscf26	12290693	12292295	-	236	25540.47	7.22	57.96	71.61	-0.389
VaccDscf21-augustus-gene-303.23-mRNA-1	Nuclear	VcLBD20b	VaccDscf21	30334872	30336767	-	235	25508.47	7.19	57.96	72.72	-0.334
VaccDscf29-augustus-gene-282.21-mRNA-1	Nuclear	VcLBD20c	VaccDscf29	14473704	14474876	-	235	25463.47	7.17	57.04	75.62	-0.317
VaccDscf19-processed-gene-39.2-mRNA-1	Chloroplast	VcLBD21a	VaccDscf19	3911402	3911950	+	182	19934.87	8.12	54.48	77.14	-0.248
VaccDscf48-processed-gene-66.17-mRNA-1	Chloroplast	VcLBD21b	VaccDscf47	8132469	8133424	-	182	19950.87	8.12	53.12	77.14	-0.251
VaccDscf4-augustus-gene-415.29-mRNA-1	Nuclear	VcLBD22a	VaccDscf48	8170437	8177306	-	262	29904.39	4.88	60.47	75.23	-0.639
VaccDscf36-augustus-gene-12.30-mRNA-1	Nuclear	VcLBD22b	VaccDscf36	10881998	10883681	-	262	29935.49	4.83	63	77.1	-0.624
VaccDscf27-augustus-gene-351.17-mRNA-1	Nuclear	VcLBD22c	VaccDscf27	23389625	23391326	-	260	29624.22	5.68	55.68	75	-0.678
VaccDscf34-processed-gene-17.4-mRNA-1	Nuclear	VcLBD22d	VaccDscf34	1783719	1785799	+	260	29610.05	5.59	56.73	74.27	-0.714
VaccDscf38-snap-gene-210.28-mRNA-1	Nuclear	VcLBD23a	VaccDscf37	6894195	6895855	-	158	18171.42	7.03	63.12	70.57	-0.575
VaccDscf39-snap-gene-237.29-mRNA-1	Nuclear	VcLBD23b	VaccDscf38	20990129	20991936	-	158	18143.36	6.64	62.64	70.57	-0.569
VaccDscf37-augustus-gene-69.35-mRNA-1	Nuclear	VcLBD23c	VaccDscf36	1278423	1281479	+	158	18112.35	6.64	62.51	70.57	-0.557
VaccDscf19-snap-gene-148.30-mRNA-1	Nuclear	VcLBD24a	VaccDscf19	14843253	14844647	-	93	10382.87	9.41	59.76	65.27	-0.36
VaccDscf15-snap-gene-54.23-mRNA-1	Nuclear	VcLBD24b	VaccDscf24	9513682	9516311	+	157	17955.13	6.99	66.84	66.05	-0.594
VaccDscf24-snap-gene-322.24-mRNA-1	Nuclear	VcLBD24c	VaccDscf15	3122519	3124955	-	157	17944.09	6.94	70.96	67.9	-0.601
VaccDscf15-snap-gene-31.32-mRNA-1	Nuclear	VcLBD24d	VaccDscf15	5424123	5425916	-	157	18023.19	6.4	67.58	71.02	-0.563
VaccDscf11-snap-gene-19.25-mRNA-1	Nuclear	VcLBD24e	VaccDscf11	1894522	1896908	-	201	23749.86	6.29	55.85	73.88	-0.339
VaccDscf44-snap-gene-228.39-mRNA-1	Nuclear	VcLBD24f	VaccDscf43	9029873	9040244	+	168	19244.63	7.75	64.51	70.42	-0.553
VaccDscf13-processed-gene-64.6-mRNA-1	Nuclear	VcLBD25a	VaccDscf13	6468785	6469297	+	170	18629.98	5.91	55.95	68.88	-0.418
VaccDscf30-snap-gene-343.78-mRNA-1	Nuclear	VcLBD25b	VaccDscf30	25458612	25460212	-	169	18498.79	5.91	56.22	69.29	-0.431
VaccDscf34-augustus-gene-121.32-mRNA-1	Nuclear	VcLBD27a	VaccDscf33	21721341	21722875	+	287	32195.79	5.2	62.57	69.72	-0.605
VaccDscf17-processed-gene-253.5-mRNA-1	Nuclear	VcLBD27b	VaccDscf17	25369294	25370820	+	287	32204.8	5.29	61.13	69.72	-0.604
VaccDscf45-processed-gene-231.4-mRNA-1	Nuclear	VcLBD27c	VaccDscf45	23123423	23124961	+	287	32183.67	5.2	63.7	69.72	-0.611

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VaccDscf27-augustus-gene-234.33-mRNA-1	Nuclear	VcLBD27d	VaccDscf27	20817843	20819782	+	373	41670.87	6.42	58.23	76.65	-0.425
VaccDscf16-augustus-gene-47.39-mRNA-1	Nuclear	VcLBD27e	VaccDscf16	4775820	4776918	+	271	31071.78	5.55	53.31	66.94	-0.589
VaccDscf7-augustus-gene-376.35-mRNA-1	Nuclear	VcLBD27f	VaccDscf7	37592039	37593575	+	222	25534.45	5.1	45.25	71.58	-0.569
VaccDscf18-snap-gene-351.45-mRNA-1	Nuclear	VcLBD27g	VaccDscf18	35115343	35116376	+	260	29742.17	5.56	53.95	65.27	-0.66
VaccDscf7-augustus-gene-376.31-mRNA-1	Nuclear	VcLBD27h	VaccDscf78	415247	419864	-	271	31050.82	5.45	60.52	67.68	-0.58
VaccDscf16-augustus-gene-48.42-mRNA-1	Nuclear	VcLBD27i	VaccDscf16	4838757	4839831	-	279	32058.02	5.88	56.1	64.66	-0.61
VaccDscf7-snap-gene-376.45-mRNA-1	Nuclear	VcLBD27j	VaccDscf7	37675176	37676262	+	267	30673.45	5.8	58.3	67.6	-0.59
VaccDscf4-processed-gene-363.14-mRNA-1	Nuclear	VcLBD27k	VaccDscf4	33428720	33430335	+	251	28303.43	6.45	53.66	64.54	-0.731
VaccDscf5-snap-gene-311.32-mRNA-1	Nuclear	VcLBD2a	VaccDscf4	41533175	41535820	+	402	45236.39	8.5	43.95	73.46	-0.381
VaccDscf8-augustus-gene-121.34-mRNA-1	Nuclear	VcLBD2b	VaccDscf7	37635450	37636538	+	356	40089.21	8.18	41.49	67.61	-0.518
VaccDscf11-augustus-gene-334.29-mRNA-1	Nuclear	VcLBD2c	VaccDscf11	33415242	33424432	-	356	39982.1	8.01	40.98	68.15	-0.528
VaccDscf10-augustus-gene-100.25-mRNA-1	Nuclear	VcLBD2d	VaccDscf10	9984442	9995062	+	356	40031.13	8.01	38.53	67.33	-0.529
VaccDscf33-processed-gene-192.3-mRNA-1	Nuclear	VcLBD33a	VaccDscf33	19286233	19287173	+	209	23361.14	5.94	55.89	63.49	-0.432
VaccDscf29-augustus-gene-144.28-mRNA-1	Nuclear	VcLBD33b	VaccDscf28	32201504	32202975	-	209	23335.06	5.94	56.81	61.63	-0.454
VaccDscf21-augustus-gene-143.22-mRNA-1	Nuclear	VcLBD33c	VaccDscf21	14380314	14381562	-	209	23314.1	5.54	53.77	64.45	-0.351
VaccDscf19-processed-gene-49.9-mRNA-1	Nuclear	VcLBD33d	VaccDscf19	4971818	4972566	-	220	24044.68	4.57	53.29	73.14	-0.289
VaccDscf20-processed-gene-53.9-mRNA-1	Nuclear	VcLBD33e	VaccDscf20	5356455	5357203	-	220	24055.75	4.64	52.9	74.91	-0.265
VaccDscf31-processed-gene-95.5-mRNA-1	Nuclear	VcLBD36a	VaccDscf31	9560810	9561709	+	268	29394.06	7.64	64.43	74.29	-0.505
VaccDscf16-processed-gene-185.0-mRNA-1	Nuclear	VcLBD36b	VaccDscf16	18473215	18474114	+	268	29404.09	7.64	65.35	74.29	-0.508
VaccDscf7-processed-gene-249.7-mRNA-1	Nuclear	VcLBD36c	VaccDscf7	24963584	24964345	-	253	28010.62	7.64	68.18	76.36	-0.502
VaccDscf3-augustus-gene-10.22-mRNA-1	Nuclear	VcLBD39a	VaccDscf39	23733303	23735110	+	220	23859.95	8.94	63.83	68.32	-0.383
VaccDscf14-augustus-gene-349.30-mRNA-1	Nuclear	VcLBD39b	VaccDscf14	34909368	34911547	+	220	23875.91	8.53	62.44	68.32	-0.365
VaccDscf2-augustus-gene-402.43-mRNA-1	Nuclear	VcLBD39c	VaccDscf29	28221645	28223473	-	220	23945.94	8.21	63.34	69.64	-0.379
VaccDscf17-processed-gene-227.1-mRNA-1	Extracellular	VcLBD39d	VaccDscf17	22734529	22736176	+	127	13628.35	4.79	73.18	87.56	-0.006

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VaccDscf27-augustus-gene-208.18-mRNA-1	Extracellular	VcLBD39e	VaccDscf26	29580191	29582267	-	175	18771.26	5.16	69.2	90.91	0.049
VaccDscf34-augustus-gene-147.23-mRNA-1	Extracellular	VcLBD39f	VaccDscf34	12156046	12157553	-	175	18757.23	5.14	67.24	90.91	0.049
VaccDscf32-augustus-gene-258.34-mRNA-1	Extracellular	VcLBD39g	VaccDscf30	34407283	34409917	-	231	24819.9	5.29	67.09	72.16	-0.281
VaccDscf30-augustus-gene-254.23-mRNA-1	Extracellular	VcLBD39h	VaccDscf2	40282107	40284102	+	231	24796.86	5.29	67.45	72.16	-0.265
VaccDscf24-snap-gene-56.35-mRNA-1	Nuclear	VcLBD3a	VaccDscf24	32263197	32264965	-	390	43172.7	5.83	50.66	88.08	-0.063
VaccDscf15-augustus-gene-334.23-mRNA-1	Chloroplast	VcLBD3b	VaccDscf15	33449092	33452710	+	248	26788.73	6.52	52.4	83.06	-0.052
VaccDscf11-augustus-gene-345.33-mRNA-1	Nuclear	VcLBD3c	VaccDscf11	34524936	34528559	+	282	30839.45	5.63	53.45	85.85	-0.039
VaccDscf36-augustus-gene-108.31-mRNA-1	Chloroplast	VcLBD40a	VaccDscf35	24238140	24239924	+	280	29504.37	7.51	46.52	78.43	-0.275
VaccDscf9-augustus-gene-311.38-mRNA-1	Chloroplast	VcLBD40b	VaccDscf8	12160339	12172844	+	280	29511.31	7.51	43.61	78.43	-0.279
VaccDscf35-augustus-gene-242.35-mRNA-1	Nuclear	VcLBD40c	VaccDscf34	14711772	14713294	-	280	29477.3	7.51	47.76	78.43	-0.29
VaccDscf4-processed-gene-334.14-mRNA-1	Chloroplast	VcLBD40d	VaccDscf48	6643663	6644211	+	315	33558.1	6.94	48.44	80.86	-0.198
VaccDscf13-augustus-gene-98.29-mRNA-1	Nuclear	VcLBD40e	VaccDscf13	9799790	9801163	-	258	27993.39	6.32	42.8	77.91	-0.441
VaccDscf25-augustus-gene-297.32-mRNA-1	Nuclear	VcLBD41a	VaccDscf24	5599638	5603042	-	258	28334.1	7.53	53.56	89.11	-0.281
VaccDscf3-augustus-gene-111.23-mRNA-1	Nuclear	VcLBD41b	VaccDscf3	1021555	1024045	-	258	28191.93	6.89	53.32	91.01	-0.249
VaccDscf2-processed-gene-302.36-mRNA-1	Nuclear	VcLBD41c	VaccDscf22	20210108	20210866	+	279	30467.53	8.58	47.32	90.43	-0.286
VaccDscf14-augustus-gene-256.33-mRNA-1	Nuclear	VcLBD41d	VaccDscf14	25618541	25620130	-	258	28177.95	8.07	50.54	89.5	-0.278
VaccDscf13-augustus-gene-133.22-mRNA-1	Nuclear	VcLBD43a	VaccDscf13	13338778	13344767	+	320	35571.99	8.22	71.19	66.19	-0.655
VaccDscf42-processed-gene-66.5-mRNA-1	Nuclear	VcLBD43b	VaccDscf42	6679183	6680043	+	286	32084.97	7.73	71.13	65.91	-0.726
VaccDscf30-processed-gene-232.0-mRNA-1	Nuclear	VcLBD43c	VaccDscf30	23194583	23195443	-	286	32065.93	7.23	69.6	65.91	-0.721
VaccDscf32-snap-gene-236.36-mRNA-1	Nuclear	VcLBD43d	VaccDscf32	4397650	4402831	-	311	35267.56	8.51	65.65	62.8	-0.755
VaccDscf15-snap-gene-302.37-mRNA-1	Nuclear	VcLBD44a	VaccDscf15	30261926	30263698	+	237	25765.3	7.6	73.02	74.56	-0.29
VaccDscf19-augustus-gene-371.24-mRNA-1	Nuclear	VcLBD44b	VaccDscf19	37092568	37094196	-	249	27248.13	6.91	65.38	78.76	-0.107
VaccDscf11-augustus-gene-315.23-mRNA-1	Nuclear	VcLBD44c	VaccDscf11	31538676	31540458	+	243	26458.97	6.17	71.78	69.51	-0.348
VaccDscf24-augustus-gene-62.35-mRNA-1	Nuclear	VcLBD44d	VaccDscf23	30187058	30188122	+	237	25769.28	6.74	71.45	74.14	-0.289

ID	Most likely Location	Gene name	Scaffold	start position	end position	sense/antisense strand	Number of Amino Acid	Molecular Weight	Theoretical pI	Instability Index	Aliphatic Index	Grand Average of Hydropathicity
VaccDscf23-augustus-gene-301.29-mRNA-1	Extracellular	VcLBD45a	VaccDscf23	30153582	30154617	+	187	20449.17	8.17	57.72	74.6	-0.199
VaccDscf41-augustus-gene-28.21-mRNA-1	Extracellular	VcLBD45b	VaccDscf41	2848892	2849977	+	187	20424.18	8.17	62.22	73.05	-0.195
VaccDscf40-augustus-gene-39.39-mRNA-1	Extracellular	VcLBD45c	VaccDscf3	11112905	11114610	+	187	20400.16	8.17	60.56	75.13	-0.197
VaccDscf12-augustus-gene-111.26-mRNA-1	Extracellular	VcLBD45d	VaccDscf12	11128672	11129723	-	187	20374.17	8.17	64.97	75.13	-0.164
VaccDscf40-snap-gene-40.23-mRNA-1	Extracellular	VcLBD45e	VaccDscf40	3962918	3964030	-	160	17376.64	8.19	67.67	78.75	-0.182
VaccDscf12-snap-gene-111.30-mRNA-1	Extracellular	VcLBD45f	VaccDscf12	11181816	11182931	+	180	19556.12	8.73	67.02	74.89	-0.231
VaccDscf23-processed-gene-300.4-mRNA-1	Extracellular	VcLBD45g	VaccDscf23	30086430	30089181	-	182	19790.28	5.54	68.67	78.85	-0.182
VaccDscf41-augustus-gene-28.20-mRNA-1	Extracellular	VcLBD46a	VaccDscf41	15904679	15910033	-	181	19578.32	5.36	66.47	81.82	0.001
VaccDscf23-augustus-gene-301.28-mRNA-1	Extracellular	VcLBD46b	VaccDscf23	30122796	30123877	+	181	19562.28	5.36	67.43	79.67	-0.029
VaccDscf41-augustus-gene-29.36-mRNA-1	Extracellular	VcLBD46c	VaccDscf41	2879955	2881149	+	184	20124.71	5.18	64.86	78.42	-0.126
VaccDscf40-snap-gene-39.47-mRNA-1	Extracellular	VcLBD46d	VaccDscf40	17012017	17017417	-	184	20148.7	5.38	63.83	76.3	-0.164
VaccDscf23-processed-gene-301.5-mRNA-1	Extracellular	VcLBD46e	VaccDscf23	30171265	30172349	+	184	20139.77	5.18	59.68	80.54	-0.104
VaccDscf12-augustus-gene-111.25-mRNA-1	Extracellular	VcLBD46f	VaccDscf12	11095696	11096590	-	183	19940.38	5.21	68.46	76.78	-0.232
VaccDscf41-augustus-gene-29.37-mRNA-1	Extracellular	VcLBD46g	VaccDscf41	2899257	2900407	+	181	19709.21	5.44	64.88	79.72	-0.154
VaccDscf23-augustus-gene-301.30-mRNA-1	Extracellular	VcLBD46h	VaccDscf9	35317156	35319342	+	181	19667.09	5.18	66.73	78.67	-0.165
VaccDscf32-augustus-gene-44.34-mRNA-1	Nuclear	VcLBD47	VaccDscf32	25841623	25843383	-	210	23247.34	5.81	43.2	96.95	-0.1
VaccDscf701-augustus-gene-0.11-mRNA-1	Nuclear	VcLBD4a	VaccDscf684	1017	9964	+	175	19164.91	8.57	59.93	69.66	-0.282
VaccDscf78-augustus-gene-4.25-mRNA-1	Nuclear	VcLBD4b	VaccDscf701	17668	21162	+	167	18124.77	7.66	59.18	73.65	-0.174
VaccDscf62-augustus-gene-5.25-mRNA-1	Nuclear	VcLBD4c	VaccDscf5	31157447	31167124	-	167	18092.71	7.66	58.28	75.39	-0.16
VaccDscf184-processed-gene-0.1-mRNA-1	Nuclear	VcLBD6a	VaccDscf184	12343	13119	+	258	27835.95	7.74	51.58	70.85	-0.436
VaccDscf109-processed-gene-4.4-mRNA-1	Nuclear	VcLBD6b	VaccDscf109	455630	456406	+	258	27912.13	7.74	51.73	70.08	-0.426
VaccDscf533-processed-gene-0.0-mRNA-1	Nuclear	VcLBD6c	VaccDscf533	37106	37882	-	258	27983.21	8.23	53.76	69.34	-0.452
VaccDscf27-processed-gene-175.6-mRNA-1	Nuclear	VcLBD6d	VaccDscf27	17551530	17552306	-	258	27968.1	7.73	51.46	66.32	-0.436
VaccDscf182-processed-gene-0.9-mRNA-1	Nuclear	VcLBD7a	VaccDscf182	82125	82919	-	264	29082.9	8.14	60.95	80.15	-0.405

ID	Most likely Location	Gene name	Scaffold	start position	end position	sense/antisense strand	Number of Amino Acid	Molecular Weight	Theoretical pI	Instability Index	Aliphatic Index	Grand Average of Hydropathicity
VaccDscf43-processed-gene-175.15-mRNA-1	Cytoplasmic	VcLBD7b	VaccDscf36	5543638	5549285	-	171	18919.3	4.68	47.64	91.17	-0.293
VaccDscf22-processed-gene-202.17-mRNA-1	Nuclear	VcLBD7c	VaccDscf9	31172964	31174966	+	252	27751.42	8.14	61.68	76.23	-0.425
VaccDscf11-processed-gene-150.9-mRNA-1	Nuclear	VcLBD9a	VaccDscf11	15008842	15009705	-	287	31979.15	8.32	61.45	50.24	-0.801
VaccDscf271-processed-gene-0.10-mRNA-1	Nuclear	VcLBD9b	VaccDscf271	11816	12679	-	287	31998.19	8.65	62.38	50.24	-0.806
VaccDscf24-processed-gene-246.0-mRNA-1	Nuclear	VcLBD9c	VaccDscf24	24599602	24600465	+	287	31982.23	8.64	61.36	51.92	-0.779
VaccDscf312-processed-gene-0.5-mRNA-1	Nuclear	VcLBD9d	VaccDscf312	116275	117150	+	291	32617.83	8.62	58.27	46.53	-0.891
VaccDscf34-processed-gene-93.1-mRNA-1	Nuclear	VcLOBa	VaccDscf34	9298729	9302983	+	198	21045.83	6.28	56.85	71.46	-0.249
VaccDscf17-processed-gene-286.7-mRNA-1	Nuclear	VcLOBb	VaccDscf17	28650232	28650801	-	189	20144.82	7.57	60.02	69.74	-0.276
VaccDscf27-snap-gene-259.34-mRNA-1	Nuclear	VcLOBc	VaccDscf27	35116272	35118259	+	199	21201.07	7.57	63.24	70.65	-0.259
VaccDscf27-processed-gene-357.1-mRNA-1	Nuclear	VcLOBd	VaccDscf27	35706917	35707483	+	188	20129.85	7.57	57.86	71.65	-0.251