SUPPLEMENTARY MATERIAL

Table SI. Disease or conditions associated with the proteins identified in Vero cells infected Zika virus according to Malacards and KEGG results. Proteins up-regulated (red) and down-regulated (green).

Disease	Genes	log2FC_ZB vs VC
Alzheimer Disease	CTNNB1	0,495765353
Alzheimer Disease Mitochondrial	SCO1	1,163538964
Alzheimer Disease	JCAD	0,646816817
Alzheimer Disease	COX5A	0,55471559
Early-Onset, Autosomal Dominant Alzheimer Disease	TOMM40	1,435733836
Alzheimer Disease	TOMM40	1,435733836
Alzheimer Disease	GAPDH	11,70650368
Alzheimer Disease	CDK5	12,07205872
Alzheimer Disease 9	CDK5	12,07205872
Alzheimer Disease	UBQLN1	12,35442573
Alzheimer Disease	TMED10	0,37981129
Alzheimer Disease	CSNK1E	11,89405495
Alzheimer Disease Mitochondrial	TFAM	0,463980422
Alzheimer Disease 19	PLD3	-0,911027704
Alzheimer Disease	PLD3	-0,911027704
Alzheimer Disease	CTSD	-1,45352693
Alzheimer Disease 11	PPIA	-1,930972949
Alzheimer Disease	MAP2K2	-0,468244257
Alzheimer Disease 3	PSEN1	-1,357968956
Early-Onset, Autosomal Dominant Alzheimer Disease	PSEN1	-1,357968956
Alzheimer Disease 4	PSEN1	-1,357968956
Alzheimer Disease	PSEN1	-1,357968956
Alzheimer Disease 2	PSEN1	-1,357968956
Alzheimer Disease 9	PSEN1	-1,357968956
Alzheimer Disease	HSPA8	-11,72544588
Alzheimer Disease	CTSB	-13,79540992
Alzheimer Disease	PSMB1	-0,22391563
Alzheimer Disease 13	HTT	-0,533618546
Alzheimer Disease	GRN	-12,89378541
Alzheimer Disease	SLC18A3	-11,3922836
Alzheimer Disease	PSMC1	-0,393229572
Alzheimer Disease	PREP	-0,365882847
Alzheimer Disease 9	EHD1	-0,073444708

Table SI. Continuation.

Alzheimer Disease	PSMA5	-0,572585775
Alzheimer Disease	UBQLN1	-0,319330761
Amyotrophic Lateral Sclerosis 1	ACO1	0,141626031
Amyotrophic Lateral Sclerosis 1	AHSA1	-0,516938771
Amyotrophic Lateral Sclerosis 1	APEX1	-0,124047303
Amyotrophic Lateral Sclerosis 1	CAPRIN1	-0,57282406
Amyotrophic Lateral Sclerosis 1	CDC27	11,68058356
Amyotrophic Lateral Sclerosis 1	CDK5	12,07205872
Amyotrophic Lateral Sclerosis 1	CRK	-0,17886504
Amyotrophic Lateral Sclerosis 1	CTSC	1,3138069
Amyotrophic Lateral Sclerosis 1	EEA1	0,494043104
Amyotrophic Lateral Sclerosis 1	EFNB1	-1,404024295
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	FAF2	0,478690874
Amyotrophic Lateral Sclerosis 1	FKBP1A	-0,526394669
Amyotrophic Lateral Sclerosis 1	GAPDH	11,70650368
Amyotrophic Lateral Sclerosis Type 5	GM2A	0,89407211
Amyotrophic Lateral Sclerosis 3	GM2A	0,89407211
Amyotrophic Lateral Sclerosis 1	GM2A	0,89407211
Amyotrophic Lateral Sclerosis 1	GRN	-12,89378541
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	GRN	-12,89378541
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	NOP56	0,442670832
Amyotrophic Lateral Sclerosis 1	SERPINH1	0,816767184
Amyotrophic Lateral Sclerosis 1	TFRC	0,506800454
Amyotrophic Lateral Sclerosis 1	EEA1	0,494043104
Amyotrophic Lateral Sclerosis 1	PGK1	0,713751081
Amyotrophic Lateral Sclerosis 18	PFN1	0,433168189
Amyotrophic Lateral Sclerosis 1	PFN1	0,433168189
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	PFN1	0,433168189
Amyotrophic Lateral Sclerosis 1	UBQLN1	12,35442573
Amyotrophic Lateral Sclerosis 8	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 1	VAPB	0,384376491
Lateral Sclerosis	VAPB	0,384376491
Amyotrophic Lateral Sclerosis Type 6	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 11	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 4, Juvenile	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 16, Juvenile	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 21	VAPB	0,384376491

Table SI. Continuation.

Amyotrophic Lateral Sclerosis 10 With Or Without Frontotemporal Dementia	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 18	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 12	VAPB	0,384376491
Amyotrophic Lateral Sclerosis Type 14	VAPB	0,384376491
Amyotrophic Lateral Sclerosis Type 5	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 17	VAPB	0,384376491
Amyotrophic Lateral Sclerosis Type 15	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 9	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 20	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 7	VAPB	0,384376491
Amyotrophic Lateral Sclerosis 7	VPS72	12,35845879
Amyotrophic Lateral Sclerosis 1	LAMP1	0,475914023
Amyotrophic Lateral Sclerosis 8	P3H3	0,60449534
Amyotrophic Lateral Sclerosis Type 6	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 10 With Or Without Frontotemporal Dementia	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 12	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 11	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 1	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 4, Juvenile	P3H3	0,60449534
Amyotrophic Lateral Sclerosis 4, Juvenile	PCF11	0,292747801
Amyotrophic Lateral Sclerosis 1	U2AF1	-0,467085144
Amyotrophic Lateral Sclerosis 1	PSEN1	-1,357968956
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	PSEN1	-1,357968956
Amyotrophic Lateral Sclerosis 1	HTT	-0,533618546
Amyotrophic Lateral Sclerosis 11	SYNJ2	-11,88773935
Amyotrophic Lateral Sclerosis 1	SYNJ2	-11,88773935
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 3	MGRN1	-11,84057443
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 4	MGRN1	-11,84057443
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 2	MGRN1	-11,84057443
Amyotrophic Lateral Sclerosis Type 22	MGRN1	-11,84057443
Amyotrophic Lateral Sclerosis 1	MGRN1	-11,84057443
Amyotrophic Lateral Sclerosis 1	SACM1L	-11,74871624
Amyotrophic Lateral Sclerosis 1	SLC18A3	-11,3922836
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	UBQLN1	-0,319330761
Amyotrophic Lateral Sclerosis 1	UBQLN1	-0,319330761
Autism	CTNNB1	0,495765353

Table SI. Continuation.

Autism	FXR1	11,52738886
Autism	CYFIP1	-1,015380682
Rare Pervasive Developmental Disorder	UBE4A	-0,793778881
Pervasive Developmental Disorder	UBE4A	-0,793778881
Autism	HTT	-0,533618546
Autism	GAMT	-12,82936543
Cardiomyopathy, Familial Restrictive, 2	EIF4A3	0,898876669
Vein Disease	SYMPK	0,46526973
Arrhythmogenic Right Ventricular Cardiomyopathy	CTNNB1	0,495765353
Aortic Valve Disease 1	CTNNB1	0,495765353
Dilated Cardiomyopathy	CTNNB1	0,495765353
Myocardial Infarction	CTNNB1	0,495765353
Hypertension, Essential	CTNNB1	0,495765353
Cardiomyopathy, Dilated, 1H	LMNB2	0,205553909
Cardiomyopathy, Dilated, 1A	LMNB2	0,205553909
Splenic Artery Aneurysm	ABRACL	2,856733578
Eclampsia	EPHX1	0,455771116
Pre-Eclampsia	EPHX1	0,455771116
Pericarditis	TPR	0,420262266
Plasminogen Activator Inhibitor-1 Deficiency	SERPINE1	0,802295461
Thrombophilia	SERPINE1	0,802295461
Disseminated Intravascular Coagulation	SERPINE1	0,802295461
Arteriosclerosis	SERPINE1	0,802295461
Venous Insufficiency	SERPINE1	0,802295461
Coronary Thrombosis	SERPINE1	0,802295461
Complete Plasminogen Activator Inhibitor 1 Deficiency	SERPINE1	0,802295461
Vascular Disease	SERPINE1	0,802295461
Chronic Venous Insufficiency	SERPINE1	0,802295461
Thrombosis	SERPINE1	0,802295461
Fibrinolytic Defect	SERPINE1	0,802295461
Post-Thrombotic Syndrome	SERPINE1	0,802295461
Protein C Deficiency	SERPINE1	0,802295461
Carotid Artery Thrombosis	SERPINE1	0,802295461
Quebec Platelet Disorder	SERPINE1	0,802295461
Portal Vein Thrombosis	SERPINE1	0,802295461
Acute Myocardial Infarction	SERPINE1	0,802295461
Cardiovascular System Disease	SERPINE1	0,802295461

Table SI. Continuation.

Thrombophlebitis	SERPINE1	0,802295461
Thrombophilia Due To Thrombin Defect	SERPINE1	0,802295461
Familial Hyperlipidemia	SERPINE1	0,802295461
Pre-Eclampsia	SERPINE1	0,802295461
Factor Xiii Deficiency	SERPINE1	0,802295461
Myocardial Infarction	SERPINE1	0,802295461
Hypertriglyceridemia, Familial	SERPINE1	0,802295461
Coronary Stenosis	SERPINE1	0,802295461
Pulmonary Embolism	SERPINE1	0,802295461
Lipid Metabolism Disorder	SERPINE1	0,802295461
Stroke, Ischemic	SERPINE1	0,802295461
Intracranial Hypertension	SERPINE1	0,802295461
Atherosclerosis Susceptibility	SERPINE1	0,802295461
Hypertension, Essential	SERPINE1	0,802295461
Subendocardial Myocardial Infarction	SERPINE1	0,802295461
Hemorrhagic Disease	SERPINE1	0,802295461
Infective Endocarditis	SERPINE1	0,802295461
Thrombophilia Due To Activated Protein C Resistance	SERPINE1	0,802295461
Coronary Heart Disease 1	SERPINE1	0,802295461
Sticky Platelet Syndrome	SERPINE1	0,802295461
Cerebrovascular Disease	SERPINE1	0,802295461
Limb Ischemia	SERPINE1	0,802295461
Eclampsia	SERPINE1	0,802295461
Pulmonary Hypertension	SERPINE1	0,802295461
Peripheral Vascular Disease	SERPINE1	0,802295461
Eclampsia	SERPINE1	0,802295461
Pulmonary Hypertension	SERPINE1	0,802295461
Peripheral Vascular Disease	SERPINE1	0,802295461
Ischemia	EEF2	0,757435024
Atrial Heart Septal Defect	NIPBL	0,632614965
Arteriovenous Malformations Of The Brain	SNW1	0,549873237
Hypertrophic Cardiomyopathy	SCO1	1,163538964
Cardioencephalomyopathy	SCO1	1,163538964
Atrial Septal Defect 1	PTBP1	0,893725006
Thrombocytopenia	TFRC	0,506800454
Dilated Cardiomyopathy	ITGA5	0,692946512
Atrial Septal Defect 4	RPS3	0,770869912

Table SI. Continuation.

Familial Isolated Dilated Cardiomyopathy	TMPO	2,320079254
Dilated Cardiomyopathy	TMPO	2,320079254
Dilated Cardiomyopathy 1T	TMPO	2,320079254
Arrhythmogenic Right Ventricular Cardiomyopathy	TMPO	2,320079254
Hypertrophic Cardiomyopathy	TMPO	2,320079254
Arterial Calcification, Generalized, Of Infancy, 1	ENPP1	0,409243631
Arterial Calcification Of Infancy	ENPP1	0,409243631
Calcification Of Joints And Arteries	ENPP1	0,409243631
Myocardial Infarction	ENPP1	0,409243631
Heart Disease	SLC8A1	0,662602935
Arrhythmogenic Right Ventricular Cardiomyopathy	SLC8A1	0,662602935
Hypertension, Essential	SLC8A1	0,662602935
Dilated Cardiomyopathy	SLC8A1	0,662602935
Hypertrophic Cardiomyopathy	SLC8A1	0,662602935
Catecholaminergic Polymorphic Ventricular Tachycardia	SLC8A1	0,662602935
Long Qt Syndrome 1	SLC8A1	0,662602935
Cardioencephalomyopathy	COX5A	0,55471559
Blood Platelet Disease	COX5A	0,55471559
Factor V Deficiency	COX5A	0,55471559
Fatal Infantile Cardioencephalomyopathy Due To Cytochrome C Oxidase Deficiency	COX5A	0,55471559
Inherited Blood Coagulation Disease	COX5A	0,55471559
Blood Coagulation Disease	COX5A	0,55471559
Myocardial Infarction	COX5A	0,55471559
Arrhythmogenic Right Ventricular Dysplasia, Familial, 12	ZYX	0,915270997
Endocardium Disease	APEH	0,598773136
Familial Hypertension	WNK1	1,104178132
Hypertension, Essential	WNK1	1,104178132
Hypertension, Essential	CYP3A5	0,415093216
Endocarditis	GAPDH	11,70650368
Heart Disease	GAPDH	11,70650368
Dilated Cardiomyopathy	GAPDH	11,70650368
Vascular Disease	GAPDH	11,70650368
Cardiomyopathy, Familial Hypertrophic, 2	GAPDH	11,70650368
Hypertension, Essential	GAPDH	11,70650368
Myocardial Infarction	GAPDH	11,70650368
Posterior Myocardial Infarction	MTREX	13,04468423

Table SI. Continuation.

Myocardial Infarction	MYDGF	13,18223424
Arrhythmogenic Right Ventricular Dysplasia, Familial, 13	RPSA	0,400343661
Arrhythmogenic Right Ventricular Dysplasia, Familial, 9	RPSA	0,400343661
Atrial Septal Defect 3	AUP1	0,764701062
Arrhythmogenic Right Ventricular Cardiomyopathy	ITGB5	0,508927075
Dilated Cardiomyopathy	ITGB5	0,508927075
Arrhythmogenic Right Ventricular Dysplasia, Familial, 5	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Cardiomyopathy	TMEM43	0,566794154
Familial Isolated Arrhythmogenic Ventricular Dysplasia, Biventricular Form	TMEM43	0,566794154
Familial Isolated Arrhythmogenic Ventricular Dysplasia, Right Dominant Form	TMEM43	0,566794154
Familial Isolated Arrhythmogenic Ventricular Dysplasia, Left Dominant Form	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 12	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 6	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 11	TMEM43	0,566794154
Cardiomyopathy, Dilated, With Woolly Hair And Keratoderma	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 2	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 8	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 4	TMEM43	0,566794154
Arrhythmogenic Right Ventricular Dysplasia, Familial, 9	TMEM43	0,566794154
Cardiac Arrest	TMEM43	0,566794154
Left Ventricular Noncompaction	TMEM43	0,566794154
Cardiomyopathy, Dilated, 1A	TMEM43	0,566794154
Cardiomyopathy, Dilated, 1H	TMEM43	0,566794154
Hypertrophic Cardiomyopathy	TMEM43	0,566794154
Heart Disease	TMEM43	0,566794154
Intrinsic Cardiomyopathy	TMEM43	0,566794154
Dilated Cardiomyopathy	TMEM43	0,566794154
Catecholaminergic Polymorphic Ventricular Tachycardia	TMEM43	0,566794154
Cardiomyopathy, Dilated, 1H	LMNB1	0,203698211
Cardiomyopathy, Dilated, 1A	LMNB1	0,203698211
Acute Myocarditis	CD70	1,149469611
Dilated Cardiomyopathy	EMD	0,515960389
Cardiomyopathy, Dilated, 1H	EMD	0,515960389
Cardiomyopathy, Dilated, 1A	EMD	0,515960389
Atrial Standstill 1	EMD	0,515960389

Table SI. Continuation.

Arrhythmogenic Right Ventricular Cardiomyopathy	EMD	0,515960389
Hypertrophic Cardiomyopathy	EMD	0,515960389
Atrial Fibrillation	EMD	0,515960389
Arrhythmogenic Right Ventricular Dysplasia, Familial, 5	EMD	0,515960389
Heart Disease	EMD	0,515960389
Hypertension, Essential	DARS2	0,666420468
Cardiomyopathy, Familial Restrictive, 1	RRP8	1,148625315
Dilated Cardiomyopathy	TFAM	0,463980422
Hypertension, Essential	SLC7A1	0,607025616
Danon Disease	GAA	0,401734641
Hypertrophic Cardiomyopathy	GAA	0,401734641
Dilated Cardiomyopathy	GAA	0,401734641
Atrial Standstill 1	GAA	0,401734641
Aortic Valve Disease 1	VCAN	-1,080944439
Endocardial Fibroelastosis	DNASE1L1	-0,856997014
Cardiomyopathy, Familial Hypertrophic, 20	DNASE1L1	-0,856997014
Left Ventricular Noncompaction	DNASE1L1	-0,856997014
Cardiomyopathy, Infantile Histiocytoid	NDUFS8	-0,901993761
Atrial Septal Defect 2	U2AF1	-0,467085144
Heart Septal Defect	U2AF1	-0,467085144
Hypertrophic Cardiomyopathy	MAP2K2	-0,468244257
Cardiomyopathy, Familial Hypertrophic, 25	MAP2K2	-0,468244257
Heart Disease	MAP2K2	-0,468244257
Left Ventricular Noncompaction	FKBP1A	-0,526394669
Dilated Cardiomyopathy	FKBP1A	-0,526394669
Arteriovenous Malformation	ENG	-1,122463334
Heart Disease	ENG	-1,122463334
Pulmonary Arterial Hypertension Associated With Congenital Heart Disease	ENG	-1,122463334
Peripheral Artery Disease	ENG	-1,122463334
Vascular Disease	ENG	-1,122463334
Myocardial Infarction	ENG	-1,122463334
Peripheral Vascular Disease	ENG	-1,122463334
Hypertension, Essential	ENG	-1,122463334
Cardiomyopathy, Dilated, 1U	PSEN1	-1,357968956
Familial Isolated Dilated Cardiomyopathy	PSEN1	-1,357968956
Dilated Cardiomyopathy	PSEN1	-1,357968956

Table SI. Continuation.

Ventricular Septal Defect	PSEN1	-1,357968956
Atrial Heart Septal Defect	RPL5	-0,442346567
Anterolateral Myocardial Infarction	BMP2K	-0,525804977
Hypoplastic Right Heart Syndrome	MYLK3	-0,48516234
Dilated Cardiomyopathy	MYLK3	-0,48516234
Dilated Cardiomyopathy	MTM1	-0,858423448
Myocardial Infarction	GCLM	-0,693734184
Patent Foramen Ovale	NMT1	-0,783026779
Atrial Heart Septal Defect	NMT1	-0,783026779
Cardiac Rupture	PMM2	-0,691204806
Ischemia	HSPA8	-11,72544588
Heart Disease	HSPA8	-11,72544588
Myocardial Infarction	HSPA8	-11,72544588
Arterial Tortuosity Syndrome	SLC2A6	-12,07855554
Arrhythmogenic Right Ventricular Cardiomyopathy	ITGA1	-11,74503309
Dilated Cardiomyopathy	ITGA1	-11,74503309
Hypertrophic Cardiomyopathy	MYO6	-0,370074261
Dilated Cardiomyopathy	CFL1	-0,283708623
Cardiomyopathy, Dilated, 1M	TMED2	-12,79124964
Cardiomyopathy, Familial Hypertrophic, 7	TMED2	-12,79124964
Cardiomyopathy, Dilated, 1P	TMED2	-12,79124964
Ventricular Tachycardia, Catecholaminergic Polymorphic, 2	VANGL1	-11,87963753
Myocardial Infarction	PROCR	-11,40737019
Disseminated Intravascular Coagulation	PROCR	-11,40737019
Cardiomyopathy, Familial Hypertrophic, 1	RHOF	-7,402195035
Cardiomyopathy, Infantile Hypertrophic	TRMU	-0,385253723
Cleft Palate, Cardiac Defects, And Mental Retardation	CPQ	-0,796424551
Hypertrophic Cardiomyopathy	ACAD9	-0,611180505
Familial Atrial Fibrillation	ACAD9	-0,611180505
Hypertension, Essential	LNPEP	-0,233519454
Atrial Tachyarrhythmia With Short Pr Interval	NDUFA6	-0,309484665
Atrial Standstill 1	MLYCD	-0,582475559
Intellectual Developmental Disorder, Autosomal Recessive 67	EIF3F	1,034931581
Learning Disability	EIF4A3	0,898876669
Mental Retardation, Autosomal Recessive 14	TECR	0,878708863
Autosomal Recessive Non-Syndromic Intellectual Disability	TECR	0,878708863
Alacrima, Achalasia, And Mental Retardation Syndrome	CTNNB1	0,495765353

Table SI. Continuation.

Syndromic Intellectual Disability	CTNNB1	0,495765353
Bipolar Disorder	CTNNB1	0,495765353
Schizophrenia	CTNNB1	0,495765353
Epilepsy, Progressive Myoclonic, 9	LMNB2	0,205553909
Epilepsy	LMNB2	0,205553909
Progressive Myoclonus Epilepsy	LMNB2	0,205553909
Progressive Myoclonus Epilepsy 10	LMNB2	0,205553909
Epilepsy, Idiopathic Generalized 2	SNRNP40	1,27617169
Familial Febrile Seizures	SNRNP40	1,27617169
Ceroid Lipofuscinosis, Neuronal, 8, Northern Epilepsy Variant	TRAM1	1,097590766
Speech Disorder	ARHGDIA	0,822882237
Spinocerebellar Ataxia 26	EEF2	0,757435024
Hereditary Ataxia	EEF2	0,757435024
Spinocerebellar Ataxia 30	EEF2	0,757435024
Mental Retardation, X-Linked, Syndromic, Snyder-Robinson Type	SMS	1,408739888
Syndromic X-Linked Intellectual Disability Snyder Type	SMS	1,408739888
Syndromic X-Linked Intellectual Disability	SMS	1,408739888
Epileptic Encephalopathy, Early Infantile, 2	NIPBL	0,632614965
Autosomal Dominant Non-Syndromic Intellectual Disability	NIPBL	0,632614965
Frontotemporal Dementia	PTBP1	0,893725006
Familial Febrile Seizures	PTBP1	0,893725006
Epileptic Encephalopathy, Early Infantile, 26	TFRC	0,506800454
Brain Edema	TFRC	0,506800454
Multiple Sclerosis	TFRC	0,506800454
Autosomal Dominant Non-Syndromic Intellectual Disability 5	PHIP	0,819628207
Syndromic Intellectual Disability	PHIP	0,819628207
Epilepsy, Idiopathic Generalized 3	RPS25	0,447552064
Epileptic Encephalopathy, Infantile Or Early Childhood, 3	ATP6V1A	1,127996755
Undetermined Early-Onset Epileptic Encephalopathy	ATP6V1A	1,127996755
Neuromuscular Disease	TMPO	2,320079254
Spinal Muscular Atrophy With Progressive Myoclonic Epilepsy	RBM14	1,571074795
Autosomal Dominant Non-Syndromic Intellectual Disability 1	MPHOSPH10	0,529784319
Autosomal Dominant Non-Syndromic Intellectual Disability	MPHOSPH10	0,529784319
Neurodevelopmental Disorder With Brain Anomalies And With Or Without Vertebral Or Cardiac Anomalies	DHX37	0,337698142
Alacrima, Achalasia, And Mental Retardation Syndrome	DHX37	0,337698142
Visual Epilepsy	DHX37	0,337698142

Table SI. Continuation.

Epileptic Encephalopathy, Early Infantile, 23	DHX37	0,337698142
Epileptic Encephalopathy, Early Infantile, 29	AIMP2	0,741301976
Cerebral Amyloid Angiopathy, Itm2b-Related, 2	FMNL2	0,71873094
Early Myoclonic Encephalopathy	COX5A	0,55471559
Myoclonic Epilepsy Associated With Ragged-Red Fibers	COX5A	0,55471559
Progressive Myoclonus Epilepsy	EPM2AIP1	0,381437223
Myoclonus Epilepsy	EPM2AIP1	0,381437223
Epilepsy	EPM2AIP1	0,381437223
Myoclonic Epilepsy Of Lafora	EPM2AIP1	0,381437223
Epilepsy, Idiopathic Generalized	EPM2AIP1	0,381437223
Autosomal Dominant Non-Syndromic Intellectual Disability 1	PDCD11	0,374619413
Autosomal Dominant Non-Syndromic Intellectual Disability	PDCD11	0,374619413
Neuromyotonia And Axonal Neuropathy, Autosomal Recessive	HINT1	1,311260671
Axonal Neuropathy	HINT1	1,311260671
Neuropathy	HINT1	1,311260671
Labyrinthitis	HINT1	1,311260671
Ataxia, Early-Onset, With Oculomotor Apraxia And Hypoalbuminemia	HINT1	1,311260671
Motor Neuron Disease	PFN1	0,433168189
Motor Peripheral Neuropathy	PES1	0,303538697
Neuropathy, Congenital Hypomyelinating, 1, Autosomal Recessive	PES1	0,303538697
Peroneal Nerve Paralysis	PES1	0,303538697
Mononeuropathy	PES1	0,303538697
Cerebellar Disease	PES1	0,303538697
Neuromuscular Disease	PES1	0,303538697
High Pressure Neurological Syndrome	APEH	0,598773136
Neuronal Ceroid Lipofuscinosis	RAB7A	0,578978041
Neuromuscular Disease	RAB7A	0,578978041
Peripheral Nervous System Disease	RAB7A	0,578978041
Cerebral Palsy	TOMM40	1,435733836
Familial Adult Myoclonic Epilepsy	ERGIC3	0,740311117
Lissencephaly 7 With Cerebellar Hypoplasia	CDK5	12,07205872
Lissencephaly	CDK5	12,07205872
Cerebellar Hypoplasia	CDK5	12,07205872
Ischemia	CDK5	12,07205872
Non-Syndromic Intellectual Disability	CDK5	12,07205872
Lissencephaly With Cerebellar Hypoplasia	CDK5	12,07205872
Transient Cerebral Ischemia	CDK5	12,07205872

Table SI. Continuation.

Syndromic Intellectual Disability	CDK5	12,07205872
Dyslexia	CDK5	12,07205872
Demyelinating Disease	ABCD1	12,50407874
Lissencephaly	SMG6	13,92588353
Miller-Dieker Lissencephaly Syndrome	SMG6	13,92588353
Progressive Myoclonus Epilepsy 4	KIRREL1	0,768095236
Epileptic Encephalopathy, Early Infantile, 11	KMT2A	0,699965007
Epileptic Encephalopathy, Early Infantile, 8	RPL35A	0,524726059
Mental Retardation, Autosomal Dominant 7	DCAF7	0,457732087
Mental Retardation, Autosomal Dominant 48	TCP1	0,419524977
Encephalopathy, Acute, Infection-Induced 9	NUP214	0,239029426
Attention Deficit-Hyperactivity Disorder	ELOC	0,669001796
Encephalopathy Due To Defective Mitochondrial And Peroxisomal Fission 1	PEX3	0,928529353
Autosomal Dominant Non-Syndromic Intellectual Disability	RAB39A	0,703797444
Cerebellar Disease	AFG3L2	11,31783037
Ceroid Lipofuscinosis, Neuronal, 8, Northern Epilepsy Variant	ERG28	11,45849488
Visual Epilepsy	ERG28	11,45849488
Specific Developmental Disorder	FXR1	11,52738886
Syndromic X-Linked Intellectual Disability	NHS	11,67193503
Syndromic Intellectual Disability	NHS	11,67193503
Epileptic Encephalopathy, Early Infantile, 1	CSNK1E	11,89405495
Bipolar Disorder	CSNK1E	11,89405495
Mental Retardation, Autosomal Recessive 50	EDC3	0,582941281
Autosomal Recessive Non-Syndromic Intellectual Disability	EDC3	0,582941281
Mental Retardation, Autosomal Dominant 38	AUP1	0,764701062
Ceroid Lipofuscinosis, Neuronal, 3	LAMP1	0,475914023
Neuronal Ceroid Lipofuscinosis	LAMP1	0,475914023
Schizotypal Personality Disorder	PSAT1	0,41950749
Multiple Sclerosis	LMNB1	0,203698211
Syndromic X-Linked Intellectual Disability Shashi Type	RBMX	1,174782377
X-Linked Intellectual Disability, Shashi Type	RBMX	1,174782377
Syndromic X-Linked Intellectual Disability	RBMX	1,174782377
Mental Retardation, X-Linked, Syndromic 34	NONO	0,308331195
Syndromic Intellectual Disability	NONO	0,308331195
Non-Syndromic X-Linked Intellectual Disability	ARHGAP1	0,479672955
Mental Retardation, Autosomal Dominant 13	SAP18	0,96515496

Table SI. Continuation.

Non-Syndromic X-Linked Intellectual Disability	HCFC1	1,23779152
Lubs X-Linked Mental Retardation Syndrome	HCFC1	1,23779152
Familial Acute Necrotizing Encephalopathy	RANBP2	0,468390627
Encephalopathy, Acute, Infection-Induced 4	RANBP2	0,468390627
Encephalopathy	RANBP2	0,468390627
Acute Necrotizing Encephalitis	RANBP2	0,468390627
Acute Hemorrhagic Encephalitis	RANBP2	0,468390627
Epilepsy, Idiopathic Generalized 7	P3H3	0,60449534
Epileptic Encephalopathy, Early Infantile, 29	MARS2	0,252873991
Pontocerebellar Hypoplasia, Type 6	MARS2	0,252873991
Pontocerebellar Hypoplasia, Type 6	DARS2	0,666420468
Pontocerebellar Hypoplasia	DARS2	0,666420468
Myoclonic Epilepsy Associated With Ragged-Red Fibers	DARS2	0,666420468
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	DARS2	0,666420468
Mitochondrial Encephalomyopathy	DARS2	0,666420468
Lissencephaly	WDR4	0,336077154
Non-Syndromic X-Linked Intellectual Disability	WDR4	0,336077154
Cerebellar Disease	L2HGDH	0,685143272
Memory Quantitative Trait Locus	WWC1	0,373353891
Syndromic X-Linked Intellectual Disability	WWC1	0,373353891
Syndromic Intellectual Disability	WWC1	0,373353891
Mental Retardation, Autosomal Recessive 36	SCAMP4	0,335592483
Myoclonic Epilepsy Associated With Ragged-Red Fibers	TFAM	0,463980422
Mitochondrial Encephalomyopathy	TFAM	0,463980422
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	TFAM	0,463980422
Visual Epilepsy	PNPO	0,952362126
Encephalopathy	PNPO	0,952362126
Autosomal Dominant Nocturnal Frontal Lobe Epilepsy	PNPO	0,952362126
Epilepsy, Myoclonic Juvenile	PNPO	0,952362126
Epileptic Encephalopathy, Early Infantile, 6	PNPO	0,952362126
Early Infantile Epileptic Encephalopathy	PNPO	0,952362126
Childhood Absence Epilepsy	PNPO	0,952362126
Epilepsy, Idiopathic Generalized	PNPO	0,952362126
Epilepsy, Idiopathic Generalized 11	CTSC	1,3138069
Deafness, Onychodystrophy, Osteodystrophy, Mental Retardation, And Seizures Syndrome	RAB35	0,535279153

Table SI. Continuation.

Somatization Disorder	UFL1	0,672332482
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	COQ6	-1,298960412
Transient Cerebral Ischemia	CTSD	-1,45352693
Intracranial Aneurysm	VCAN	-1,080944439
Epilepsy	STAMBP	-0,46484677
Ceroid Lipofuscinosis, Neuronal, 8	SEC24A	-0,627214071
Craniolenticulosutural Dysplasia	SEC24A	-0,627214071
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	NDUFS8	-0,901993761
Ceroid Lipofuscinosis, Neuronal, 2	SKP1	-0,463067034
Autosomal Dominant Non-Syndromic Intellectual Disability 3	U2AF1	-0,467085144
Autoimmune Disease Of Central Nervous System	U2AF1	-0,467085144
Pontocerebellar Hypoplasia, Type 1B	U2AF1	-0,467085144
Nervous System Disease	U2AF1	-0,467085144
Progressive Myoclonus Epilepsy	U2AF1	-0,467085144
Demyelinating Disease	U2AF1	-0,467085144
Central Nervous System Disease	U2AF1	-0,467085144
Disease Of Mental Health	U2AF1	-0,467085144
Peripheral Nervous System Disease	U2AF1	-0,467085144
Mitochondrial Encephalomyopathy	COQ4	-0,866075031
Post-Traumatic Stress Disorder	DICER1	-0,994708277
Hypomyelinating Leukoencephalopathy	HIKESHI	-0,559138193
Arteriovenous Malformations Of The Brain	ENG	-1,122463334
Familial Cerebral Saccular Aneurysm	ENG	-1,122463334
Intracranial Aneurysm	ENG	-1,122463334
Cerebral Cavernous Malformations	ENG	-1,122463334
Stroke, Ischemic	ENG	-1,122463334
Cerebral Amyloid Angiopathy, Cst3-Related	PSEN1	-1,357968956
Cerebral Amyloid Angiopathy, App-Related	PSEN1	-1,357968956
Speech And Communication Disorders	PSEN1	-1,357968956
Toxic Encephalopathy	PSEN1	-1,357968956
Cerebral Amyloid Angiopathy, Itm2b-Related, 1	PSEN1	-1,357968956
Amnestic Disorder	PSEN1	-1,357968956
Disease Of Mental Health	PSEN1	-1,357968956
Central Nervous System Disease	PSEN1	-1,357968956
Stroke, Ischemic	PSEN1	-1,357968956

Table SI. Continuation.

Neurodevelopmental Disorder With Spastic Quadriplegia And Brain Abnormalities With Or Without Seizures	WDR45B	-1,008783656
Muscular Dystrophy, Congenital, With Cataracts And Intellectual Disability	WDR45B	-1,008783656
Mixed Receptive-Expressive Language Disorder	WDR45B	-1,008783656
Epilepsy	CYFIP1	-1,015380682
Syndromic X-Linked Intellectual Disability Siderius Type	CYFIP1	-1,015380682
Childhood Absence Epilepsy	CYFIP1	-1,015380682
Encephalopathy, Ethylmalonic	PRRC2C	-0,759617784
Mental Retardation, X-Linked, With Cerebellar Hypoplasia And Distinctive Facial Appearance	COQ8A	-0,834743056
Cerebellar Disease	COQ8A	-0,834743056
Mitochondrial Encephalomyopathy	COQ8A	-0,834743056
Developmental Coordination Disorder	BMP2K	-0,525804977
Dissociative Amnesia	BMP2K	-0,525804977
Epilepsy, Idiopathic Generalized	ME2	-0,506903305
Epilepsy	ME2	-0,506903305
Epilepsy, Myoclonic Juvenile	ME2	-0,506903305
Generalized Epilepsy With Febrile Seizures Plus	ME2	-0,506903305
Acute Disseminated Encephalomyelitis	DPYSL5	-0,344322478
Cerebellar Disease	DPYSL5	-0,344322478
Mega-Corpus-Callosum Syndrome With Cerebellar Hypoplasia And Cortical Malformations	ARPP19	-0,519864495
Non-Syndromic X-Linked Intellectual Disability	GDI1	-0,323783042
Epileptic Encephalopathy, Early Infantile, 8	GDI1	-0,323783042
Attention Deficit-Hyperactivity Disorder	DCLK1	-1,207473536
Cerebral Atrophy	PMM2	-0,691204806
Cerebral Palsy	PMM2	-0,691204806
Isolated Cerebellar Agenesis	PMM2	-0,691204806
Cerebellar Hypoplasia/Atrophy, Epilepsy, And Global Developmental Delay	PMM2	-0,691204806
Cerebellar Hypoplasia	PMM2	-0,691204806
Multiple Congenital Anomalies-Hypotonia-Seizures Syndrome 3	PMM2	-0,691204806
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	TFB1M	-0,549640686
Stroke, Ischemic	HSPA8	-11,72544588
Mental Retardation, Autosomal Dominant 56	CLTC	-11,23159957
Undetermined Early-Onset Epileptic Encephalopathy	CLTC	-11,23159957
Autosomal Dominant Non-Syndromic Intellectual Disability	CLTC	-11,23159957

Table SI. Continuation.

Cerebral Aneurysms	CTSB	-13,79540992
Cerebral Amyloid Angiopathy, Cst3-Related	CTSB	-13,79540992
Major Depressive Disorder	LHPP	-12,37889812
Mental Retardation, Autosomal Recessive 54	TNIK	-12,31656902
Autosomal Recessive Non-Syndromic Intellectual Disability	TNIK	-12,31656902
Cerebral Creatine Deficiency Syndrome 3	GATM	-12,02811578
Cerebral Creatine Deficiency Syndrome	GATM	-12,02811578
Speech And Communication Disorders	GATM	-12,02811578
Cerebral Creatine Deficiency Syndrome 2	GATM	-12,02811578
Cerebral Creatine Deficiency Syndrome 1	GATM	-12,02811578
Neurometabolic Disease	GATM	-12,02811578
Visual Epilepsy	ARFGEF2	-11,8555044
Neuronal Migration Disorders	ARFGEF2	-11,8555044
Attention Deficit-Hyperactivity Disorder	ITGA1	-11,74503309
Pick Disease Of Brain	HTT	-0,533618546
Toxic Encephalopathy	HTT	-0,533618546
Mental Retardation, Autosomal Dominant 56	HTT	-0,533618546
Central Nervous System Disease	HTT	-0,533618546
Ceroid Lipofuscinosis, Neuronal, 11	GRN	-12,89378541
Frontotemporal Lobar Degeneration With Tdp43 Inclusions, Grn-Related	GRN	-12,89378541
Pick Disease Of Brain	GRN	-12,89378541
Speech And Communication Disorders	GRN	-12,89378541
Impulse Control Disorder	GRN	-12,89378541
Neuronal Ceroid Lipofuscinosis	GRN	-12,89378541
Mental Retardation, Autosomal Dominant 21	GRN	-12,89378541
Ceroid Lipofuscinosis, Neuronal, 13	GRN	-12,89378541
Ceroid Lipofuscinosis, Neuronal, 7	GRN	-12,89378541
Ceroid Lipofuscinosis, Neuronal, 10	GRN	-12,89378541
Disease Of Mental Health	GRN	-12,89378541
Cerebral Creatine Deficiency Syndrome 2	GAMT	-12,82936543
Cerebral Creatine Deficiency Syndrome	GAMT	-12,82936543
Neurometabolic Disease	GAMT	-12,82936543
Cerebral Creatine Deficiency Syndrome 3	GAMT	-12,82936543
Cerebral Creatine Deficiency Syndrome 1	GAMT	-12,82936543
Epilepsy	GAMT	-12,82936543
Gyrate Atrophy Of Choroid And Retina	GAMT	-12,82936543
Glycine Encephalopathy	GAMT	-12,82936543

Table SI. Continuation.

Autosomal Dominant Non-Syndromic Intellectual Disability 24	SP100	-11,82368629
Epileptic Encephalopathy, Early Infantile, 53	SACM1L	-11,74871624
Cerebral Cavernous Malformations	PROCR	-11,40737019
Cerebrovascular Disease	PROCR	-11,40737019
Stroke, Ischemic	PROCR	-11,40737019
Glycine Encephalopathy	ISCA1	-7,873737273
Cerebral Hypoxia	BCAR1	-7,268207615
Factitious Disorder	NASP	-0,436525184
Epilepsy, Familial Temporal Lobe, 6	PPL	-0,123667464
Lissencephaly	CRK	-0,17886504
Non-Syndromic X-Linked Intellectual Disability	ARHGEF7	-0,576340916
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	TRMU	-0,385253723
Mitochondrial Encephalomyopathy	TRMU	-0,385253723
Early Myoclonic Encephalopathy	TRMU	-0,385253723
Cleft Palate, Cardiac Defects, And Mental Retardation	CPQ	-0,796424551
Deafness, Dystonia, And Cerebral Hypomyelination	BCAP31	-0,466222112
Cerebral Creatine Deficiency Syndrome 1	BCAP31	-0,466222112
Cerebral Creatine Deficiency Syndrome	BCAP31	-0,466222112
Benign Epilepsy With Centrotemporal Spikes	DCDC1	-0,603938679
Neuronal Ceroid Lipofuscinosis	ARL6IP5	-0,245527171
Amnestic Disorder	PREP	-0,365882847
Post-Traumatic Stress Disorder	PREP	-0,365882847
Bipolar Disorder	PREP	-0,365882847
Mental Retardation, Enteropathy, Deafness, Peripheral Neuropathy, Ichthyosis, And Keratoderma	AP1S2	-0,225742827
Mental Retardation, Autosomal Dominant 21	AP1S2	-0,225742827
Mitochondrial Encephalomyopathy	ACAD9	-0,611180505
Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, And Stroke-Like Episodes	ACAD9	-0,611180505
Ceroid Lipofuscinosis, Neuronal, 3	HOOK1	-1,075053542
Neuronal Ceroid Lipofuscinosis	HOOK1	-1,075053542
Cerebral Dysgenesis, Neuropathy, Ichthyosis, And Palmoplantar Keratoderma Syndrome	EHD1	-0,073444708
Adjustment Disorder	EHD1	-0,073444708
Spinocerebellar Ataxia 36	NOP56	0,442670832
Spinocerebellar Ataxia 10	NOP56	0,442670832
Spinocerebellar Ataxia 31	NOP56	0,442670832

Table SI. Continuation.

Spinocerebellar Ataxia 37	NOP56	0,442670832
Hereditary Ataxia	NOP56	0,442670832
Spinocerebellar Ataxia 29	NOP56	0,442670832
Spinocerebellar Ataxia 30	NOP56	0,442670832
X-Linked Hereditary Ataxia	NOP56	0,442670832
Huntington Disease-Like 2	NOP56	0,442670832
Fragile X-Associated Tremor/Ataxia Syndrome	NOP56	0,442670832
Spinocerebellar Ataxia 8	NOP56	0,442670832
Autosomal Dominant Cerebellar Ataxia	NOP56	0,442670832
Cerebellar Disease	NOP56	0,442670832
Friedreich Ataxia	TFRC	0,506800454
Leigh Syndrome With Cardiomyopathy	NDUFAF3	0,669208185
Leigh Syndrome	NDUFAF3	0,669208185
Ataxia, Early-Onset, With Oculomotor Apraxia And Hypoalbuminemia	FEN1	0,504213533
Huntington Disease	FEN1	0,504213533
Spinocerebellar Ataxia Type 1 With Axonal Neuropathy	FEN1	0,504213533
Lateral Sclerosis	PFN1	0,433168189
Frontotemporal Dementia	PFN1	0,433168189
Spastic Ataxia, Charlevoix-Saguenay Type	PES1	0,303538697
Spinocerebellar Ataxia, Autosomal Recessive 27	APEH	0,598773136
Frontotemporal Dementia	TOMM40	1,435733836
Spinocerebellar Ataxia Type 1 With Axonal Neuropathy	LIG3	11,16661245
Ataxia, Early-Onset, With Oculomotor Apraxia And Hypoalbuminemia	LIG3	11,16661245
Huntington Disease	GAPDH	11,70650368
Cerebral Degeneration	GAPDH	11,70650368
Dementia, Lewy Body	CDK5	12,07205872
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	UBQLN1	12,35442573
Cerebral Degeneration	ABCD1	12,50407874
Spinocerebellar Degeneration	ABCD1	12,50407874
Friedreich Ataxia	HSPA9	0,127232452
Spinocerebellar Ataxia 38	ELOVL5	0,844642188
Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1	VAPB	0,384376491
Spinocerebellar Ataxia 2	VAPB	0,384376491
Inclusion Body Myopathy With Early-Onset Paget Disease Of Bone With Or Without Frontotemporal Dementia 1	PEX3	0,928529353
Inclusion Body Myopathy With Paget Disease Of Bone And Frontotemporal Dementia	PEX3	0,928529353
Spastic Ataxia 5	PHB	1,321235801

Table SI. Continuation.

Spinocerebellar Ataxia 28	AFG3L2	11,31783037
Spastic Ataxia 5, Autosomal Recessive	AFG3L2	11,31783037
Spastic Ataxia 5	AFG3L2	11,31783037
Spastic Ataxia	AFG3L2	11,31783037
Autosomal Dominant Cerebellar Ataxia	AFG3L2	11,31783037
Spinocerebellar Ataxia 21	AFG3L2	11,31783037
Spinocerebellar Ataxia 29	AFG3L2	11,31783037
Hereditary Ataxia	AFG3L2	11,31783037
Spinocerebellar Ataxia 18	AFG3L2	11,31783037
Spinocerebellar Ataxia, Autosomal Recessive 14	AFG3L2	11,31783037
Spastic Ataxia 4	AFG3L2	11,31783037
Optic Atrophy 10 With Or Without Ataxia, Mental Retardation, And Seizures	AFG3L2	11,31783037
Spinocerebellar Ataxia 15	AFG3L2	11,31783037
Spinocerebellar Ataxia 30	AFG3L2	11,31783037
Cerebellar Ataxia Type 41	AFG3L2	11,31783037
Episodic Ataxia	AFG3L2	11,31783037
Neuronal Ceroid Lipofuscinosis	ERG28	11,45849488
Semantic Dementia	PCBP2	11,7553888
Frontotemporal Dementia	PCBP2	11,7553888
Anemia, Sideroblastic, And Spinocerebellar Ataxia	ABCB8	11,83596044
Spinocerebellar Ataxia, Autosomal Recessive, With Axonal Neuropathy 3	COA7	0,427985579
Cerebral Degeneration	LMNB1	0,203698211
X-Linked Hereditary Ataxia	RBMX	1,174782377
Fragile X-Associated Tremor/Ataxia Syndrome	RBMX	1,174782377
Spinocerebellar Ataxia Autosomal Recessive 5	ZNF592	0,518392357
Spinocerebellar Ataxia, Autosomal Recessive 6	ZNF592	0,518392357
Spinocerebellar Ataxia, Autosomal Recessive 4	ZNF592	0,518392357
Autosomal Recessive Cerebellar Ataxia	ZNF592	0,518392357
Spinocerebellar Ataxia, Autosomal Recessive 3	ZNF592	0,518392357
Autosomal Recessive Congenital Cerebellar Ataxia	ZNF592	0,518392357
Spinocerebellar Ataxia, Autosomal Recessive 8	EMD	0,515960389
Friedreich Ataxia	ACO1	0,141626031
Anemia, Sideroblastic, And Spinocerebellar Ataxia	ACO1	0,141626031
Autosomal Recessive Cerebellar Ataxia	ACO1	0,141626031
Spinocerebellar Ataxia 5	SPTBN1	0,505508816
Spastic Ataxia 5	TOMM70	0,446597693

Table SI. Continuation.

Inclusion Body Myopathy With Paget Disease Of Bone And Frontotemporal Dementia	TOMM70	0,446597693
Spastic Ataxia 3, Autosomal Recessive	MARS2	0,252873991
Spastic Ataxia 3	MARS2	0,252873991
Spastic Ataxia	MARS2	0,252873991
Spastic Ataxia 2	MARS2	0,252873991
Spinocerebellar Ataxia, Autosomal Recessive 14	DARS2	0,666420468
Sensory Ataxic Neuropathy, Dysarthria, And Ophthalmoparesis	DARS2	0,666420468
Episodic Ataxia	DARS2	0,666420468
Spinocerebellar Ataxia 46	PLD3	-0,911027704
Spinocerebellar Ataxia, Autosomal Recessive 24	PLD3	-0,911027704
Spinocerebellar Ataxia, Autosomal Recessive 21	PLD3	-0,911027704
Cerebellar Ataxia Type 47	PLD3	-0,911027704
Ceroid Lipofuscinosis, Neuronal, 10	CTSD	-1,45352693
Neuronal Ceroid Lipofuscinosis	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 3	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 2	CTSD	-1,45352693
Dementia	CTSD	-1,45352693
Creutzfeldt-Jakob Disease	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 7	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 13	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 1	CTSD	-1,45352693
Ceroid Lipofuscinosis, Neuronal, 4A, Autosomal Recessive	CTSD	-1,45352693
Dementia, Lewy Body	CTSD	-1,45352693
Spinocerebellar Ataxia, Autosomal Recessive 12	IGFBP7	-1,288993375
Anemia, Sideroblastic, And Spinocerebellar Ataxia	U2AF1	-0,467085144
Spinocerebellar Ataxia, Autosomal Recessive, With Axonal Neuropathy 2	U2AF1	-0,467085144
Pick Disease Of Brain	PSEN1	-1,357968956
Frontotemporal Dementia	PSEN1	-1,357968956
Semantic Dementia	PSEN1	-1,357968956
Dementia	PSEN1	-1,357968956
Vascular Dementia	PSEN1	-1,357968956
Dementia, Lewy Body	PSEN1	-1,357968956
Huntington Disease	PSEN1	-1,357968956
Neurodegeneration With Brain Iron Accumulation 5	WDR45B	-1,008783656
Spinocerebellar Ataxia, Autosomal Recessive 3	CYFIP1	-1,015380682
Autosomal Recessive Cerebellar Ataxia	COQ8A	-0,834743056

Table SI. Continuation.

Spinocerebellar Ataxia, Autosomal Recessive 14	COQ8A	-0,834743056
Spinocerebellar Ataxia, Autosomal Recessive 8	COQ8A	-0,834743056
Hereditary Ataxia	COQ8A	-0,834743056
Ataxia, Early-Onset, With Oculomotor Apraxia And Hypoalbuminemia	COQ8A	-0,834743056
Sensory Ataxic Neuropathy, Dysarthria, And Ophthalmoparesis	COQ8A	-0,834743056
Ataxia, Sensory, 1, Autosomal Dominant	NUCB1	-0,199736212
Cerebellar Ataxia, Nonprogressive, With Mental Retardation	SMYD3	-0,685643518
Spinocerebellar Ataxia Type 1 With Axonal Neuropathy	APEX1	-0,124047303
Ataxia, Early-Onset, With Oculomotor Apraxia And Hypoalbuminemia	APEX1	-0,124047303
Huntington Disease	CLTC	-11,23159957
Polyneuropathy, Hearing Loss, Ataxia, Retinitis Pigmentosa, And Cataract	LPCAT4	-12,5205229
Spastic Ataxia	DST	-12,51695893
Huntington Disease	HTT	-0,533618546
Spinocerebellar Ataxia 1	HTT	-0,533618546
Huntington Disease-Like 2	HTT	-0,533618546
Dementia	HTT	-0,533618546
Spinocerebellar Ataxia 2	HTT	-0,533618546
Autosomal Dominant Cerebellar Ataxia	HTT	-0,533618546
Dementia, Lewy Body	HTT	-0,533618546
Spinocerebellar Ataxia 8	HTT	-0,533618546
Corticobasal Degeneration	CFL1	-0,283708623
Frontotemporal Dementia	GRN	-12,89378541
Semantic Dementia	GRN	-12,89378541
Dementia	GRN	-12,89378541
Grn-Related Frontotemporal Lobar Degeneration	GRN	-12,89378541
Grn Frontotemporal Dementia	GRN	-12,89378541
Frontotemporal Dementia, Chromosome 3-Linked	GRN	-12,89378541
Primary Progressive Multiple Sclerosis	GRN	-12,89378541
Dementia, Lewy Body	GRN	-12,89378541
Anemia, Sideroblastic, And Spinocerebellar Ataxia	ISCA1	-7,873737273
Spinocerebellar Ataxia 11	FKBP15	-0,685108887
Spinocerebellar Ataxia 10	HNRNPK	-0,441976115
Huntington Disease	PSMD7	-0,124353349
Parkinson Disease, Late-Onset	AIMP2	0,741301976
Parkinson Disease, Late-Onset	TOMM20	0,805301018
Parkinson Disease, Late-Onset	EEA1	0,494043104
Parkinson Disease, Late-Onset	RAB7A	0,578978041

Table SI. Continuation.

Parkinson Disease, Late-Onset	GAPDH	11,70650368
Parkinson Disease, Late-Onset	CDK5	12,07205872
Parkinson Disease, Late-Onset	HSPA9	0,127232452
Parkinson Disease 4, Autosomal Dominant	PHB	1,321235801
Parkinson Disease, Late-Onset	AUP1	0,764701062
Parkinson Disease, Late-Onset	LAMP1	0,475914023
Parkinson Disease, Late-Onset	TFAM	0,463980422
Parkinson Disease 17	GAA	0,401734641
Parkinson Disease, Late-Onset	ARIH2	1,305664201
Parkinson Disease, Late-Onset	CTSD	-1,45352693
Parkinson Disease 15, Autosomal Recessive Early-Onset	SKP1	-0,463067034
Parkinson Disease, Late-Onset	DENR	-0,499788325
Parkinson Disease, Late-Onset	PSEN1	-1,357968956
Parkinson Disease 4, Autosomal Dominant	GCLM	-0,693734184
Parkinson Disease 3, Autosomal Dominant	SPR	-0,3157341
Parkinson Disease, Late-Onset	SPR	-0,3157341
Parkinson Disease, Late-Onset	HSPA8	-11,72544588
Parkinson Disease 2, Autosomal Recessive Juvenile	CTSB	-13,79540992
Parkinson Disease, Late-Onset	HTT	-0,533618546
Parkinson Disease 4, Autosomal Dominant	IMMT	-12,41161408
Parkinson Disease 7, Autosomal Recessive Early-Onset	LYRM7	-11,91613716
Parkinson Disease 20, Early-Onset	SACM1L	-11,74871624
Parkinson Disease, Late-Onset	SACM1L	-11,74871624
Juvenile-Onset Parkinson's Disease	ANKIB1	-11,58812571
Parkinson Disease, Late-Onset	AAK1	-0,805139107
Parkinson Disease, Late-Onset	ALDH1A1	-0,27671415
Schizophrenia	HINT1	1,311260671
Schizophrenia	GAPDH	11,70650368
Schizophrenia	CDK5	12,07205872
Schizophrenia	PSAT1	0,41950749
Schizophrenia	CYFIP1	-1,015380682
Schizophrenia	HSPA8	-11,72544588
Schizophrenia	TNIK	-12,31656902
Schizophrenia	CFL1	-0,283708623

Table SI. Continuation.

Top 20 KEGG Pathways	Number of genes
Metabolic pathways	73
Amyotrophic lateral sclerosis	23
Pathways of neurodegeneration - multiple diseases	21
Spliceosome	21
Ribosome	19
Protein processing in endoplasmic reticulum	18
Alzheimer disease	18
Huntington disease	17
Human papillomavirus infection	17
RNA transport	16
Salmonella infection	15
Endocytosis	15
Pathways in cancer	14
Prion disease	14
Regulation of actin cytoskeleton	13
Phagosome	13
Focal adhesion	12
Lysosome	12
Parkinson disease	12
MicroRNAs in cancer	11

Table SII. Disease or conditions associated with the proteins identified in Vero cell infected with Zika virus according to Disgenet.

el	disease_name	geneid	protein_class	gene_ symbol	score	diseaseid	disease_ semantic_type	source
moderate	FRONTOTEMPORAL LOBAR DEGENERATION WITH TDP43 INCLUSIONS, GRN-RELATED	2896		GRN	0,98	C1843792	Disease or Syndrome	UNIPROT
	Cytochrome-c Oxidase Deficiency	6341	DTO_05007624	SCO1	0,94	C0268237	Disease or Syndrome; Congenital Abnormality	UNIPROT
	NEURONAL CEROID LIPOFUSCINOSIS DUE TO CATHEPSIN D DEFICIENCY	1509	DTO_05007624	CTSD	0,93	C1864669	Disease or Syndrome	UNIPROT
	Malignant neoplasm of ovary	1499		CTNNB1	0,9	C1140680	Neoplastic Process	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
	Medulloblastoma	1499		CTNNB1	0,8	C0025149	Neoplastic Process	UNIPROT
	Pilomatrixoma	1499		CTNNB1	0,8	C0206711	Neoplastic Process	UNIPROT
strong	Liver carcinoma	1499		CTNNB1	0,8	C2239176	Neoplastic Process	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT
	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
	Colorectal Carcinoma	1499		CTNNB1	0,7	C0009402	Neoplastic Process	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 19	1499		CTNNB1	0,7	C3554449	Disease or Syndrome	UNIPROT
	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
strong	EXUDATIVE VITREORETINOPATHY 7	1499		CTNNB1	0,6	C4539767	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	CARDIOFACIOCUTANEOUS SYNDROME 4	5605	DTO_03300101	MAP2K2	0,6	C3809007	Disease or Syndrome	UNIPROT
	MYASTHENIC SYNDROME, CONGENITAL, 21, PRESYNAPTIC	6572	DTO_05007405	SLC18A3	0,6	C4310654	Disease or Syndrome	UNIPROT
moderate	MITOCHONDRIAL DNA DEPLETION SYNDROME 15 (HEPATOCEREBRAL TYPE)	7019		TFAM	0,6	C4310690	Disease or Syndrome	UNIPROT
	SPINOCEREBELLAR ATAXIA 46	23646		PLD3	0,3	C4540404	Disease or Syndrome	UNIPROT
	Craniofrontonasal dysplasia	1947	DTO_05007599	EFNB1	1	C0220767	Disease or Syndrome	UNIPROT
moderate	FRONTOTEMPORAL LOBAR DEGENERATION WITH TDP43 INCLUSIONS, GRN-RELATED	2896		GRN	0,98	C1843792	Disease or Syndrome	UNIPROT
strong	Tay-Sachs Disease, AB Variant	2760	DTO_05007405	GM2A	0,92	C0268275	Disease or Syndrome	UNIPROT
strong	OSTEOGENESIS IMPERFECTA, TYPE X	871	DTO_05007584	SERPINH1	0,91	C3151211	Disease or Syndrome	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
strong	Papillon-Lefevre Disease	1075	DTO_05007624	CTSC	0,8	C0030360	Disease or Syndrome	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT

Table SII. Continuation.

	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
	Phosphoglycerate Kinase 1 Deficiency	5230	DTO_03300101	PGK1	0,77	C1970848	Disease or Syndrome	UNIPROT
strong	HAIM-MUNK SYNDROME	1075	DTO_05007624	CTSC	0,75	C1855627	Disease or Syndrome	UNIPROT
	AMYOTROPHIC LATERAL SCLEROSIS 8 (disorder)	9217	DTO_05007405	VAPB	0,73	C1837728	Disease or Syndrome	UNIPROT
strong	Periodontitis, Aggressive, 1	1075	DTO_05007624	CTSC	0,7	C4551681	Disease or Syndrome	UNIPROT
strong	AMYOTROPHIC LATERAL SCLEROSIS 18	5216		PFN1	0,7	C3553719	Disease or Syndrome	UNIPROT
	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
	IMMUNODEFICIENCY 46	7037	DTO_05007624	TFRC	0,7	C4225219	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	MYASTHENIC SYNDROME, CONGENITAL, 21, PRESYNAPTIC	6572	DTO_05007405	SLC18A3	0,6	C4310654	Disease or Syndrome	UNIPROT
moderate	SPINAL MUSCULAR ATROPHY, LATE-ONSET, FINKEL TYPE	9217	DTO_05007405	VAPB	0,6	C1854058	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	996		CDC27	0,33	C0006142	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	6944	DTO_05007624	VPS72	0,3	C0006142	Neoplastic Process	UNIPROT
definitive	Guanidinoacetate methyltransferase deficiency	2593		GAMT	0,94	C0574080	Disease or Syndrome	UNIPROT
	Malignant neoplasm of ovary	1499		CTNNB1	0,9	C1140680	Neoplastic Process	UNIPROT
	Medulloblastoma	1499		CTNNB1	0,8	C0025149	Neoplastic Process	UNIPROT
	Pilomatrixoma	1499		CTNNB1	0,8	C0206711	Neoplastic Process	UNIPROT
strong	Liver carcinoma	1499		CTNNB1	0,8	C2239176	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	1499		CTNNB1	0,7	C0009402	Neoplastic Process	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 19	1499		CTNNB1	0,7	C3554449	Disease or Syndrome	UNIPROT
strong	EXUDATIVE VITREORETINOPATHY 7	1499		CTNNB1	0,6	C4539767	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	8087	DTO_05007557	FXR1	0,3	C0006142	Neoplastic Process	UNIPROT
definitive	Glycogen storage disease type II	2548	DTO_05007624	GAA	1	C0017921	Disease or Syndrome	UNIPROT

Table SII. Continuation.

	Cytochrome-c Oxidase Deficiency	6341	DTO_05007624	SCO1	0,94	C0268237	Disease or Syndrome; Congenital Abnormality	UNIPROT
	Malignant neoplasm of ovary	1499		CTNNB1	0,9	C1140680	Neoplastic Process	UNIPROT
strong	Deafness, Autosomal Recessive 37	4646	DTO_05007530	MYO6	0,9	C1843028	Disease or Syndrome	UNIPROT
strong	Deafness, autosomal dominant nonsyndromic sensorineural 22	4646	DTO_05007530	MYO6	0,9	C2931767	Disease or Syndrome	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
	Medulloblastoma	1499		CTNNB1	0,8	C0025149	Neoplastic Process	UNIPROT
	Pilomatrixoma	1499		CTNNB1	0,8	C0206711	Neoplastic Process	UNIPROT
strong	Liver carcinoma	1499		CTNNB1	0,8	C2239176	Neoplastic Process	UNIPROT
	X-Linked Emery-Dreifuss Muscular Dystrophy	2010		EMD	0,8	C0751337	Disease or Syndrome	UNIPROT
definitive	X-linked centronuclear myopathy	4534	DTO_05007624	MTM1	0,8	C0410203	Congenital Abnormality	UNIPROT
	Congenital disorder of glycosylation type 1A	5373	DTO_05007624	PMM2	0,8	C0349653	Disease or Syndrome	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT
	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
	Leukoencephalopathy with Brainstem and Spinal Cord Involvement and Lactate Elevation	55157	DTO_05007624	DARS2	0,78	C1970180	Disease or Syndrome	UNIPROT
strong	Telangiectasia, Hereditary Hemorrhagic, Type 1	2022		ENG	0,76	C4551861	Disease or Syndrome	UNIPROT
	Splenic Hypoplasia	3921	DTO_05007557	RPSA	0,74	C0685889	Congenital Abnormality	UNIPROT
	Cole disease	5167	DTO_05007624	ENPP1	0,72	C3809781	Disease or Syndrome	UNIPROT
	Richieri Costa Pereira syndrome	9775		EIF4A3	0,72	C1849348	Disease or Syndrome	UNIPROT
	Colorectal Carcinoma	1499		CTNNB1	0,7	C0009402	Neoplastic Process	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 19	1499		CTNNB1	0,7	C3554449	Disease or Syndrome	UNIPROT
	SPINOCEREBELLAR ATAXIA 26	1938	DTO_05007624	EEF2	0,7	C1836395	Disease or Syndrome	UNIPROT
strong	Cornelia de Lange Syndrome 1	25836	DTO_05007557	NIPBL	0,7	C4551851	Disease or Syndrome	UNIPROT
	OSSIFICATION OF THE POSTERIOR LONGITUDINAL LIGAMENT OF SPINE	5167	DTO_05007624	ENPP1	0,7	C1865343	Disease or Syndrome	UNIPROT
	Hypophosphatemic Rickets, Autosomal Recessive, 2	5167	DTO_05007624	ENPP1	0,7	C2750078	Disease or Syndrome	UNIPROT
strong	LIVER FAILURE, INFANTILE, TRANSIENT	55687		TRMU	0,7	C3278664	Disease or Syndrome	UNIPROT
	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
strong	Aase Smith syndrome 2	6125	DTO_05007557	RPL5	0,7	C2931850	Disease or Syndrome	UNIPROT

Table SII. Continuation.

	IMMUNODEFICIENCY 46	7037	DTO_05007624	TFRC	0,7	C4225219	Disease or Syndrome	UNIPROT
	ARRHYTHMOGENIC RIGHT VENTRICULAR DYSPLASIA, FAMILIAL, 5 (disorder)	79188		TMEM43	0,7	C1858379	Disease or Syndrome	UNIPROT
limited	EPILEPSY, PROGRESSIVE MYOCLONIC, 9	84823		LMNB2	0,7	C4225289	Disease or Syndrome	UNIPROT
strong	EXUDATIVE VITREORETINOPATHY 7	1499		CTNNB1	0,6	C4539767	Disease or Syndrome	UNIPROT
	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 20	28976	DTO_05007624	ACAD9	0,6	C4747517	Disease or Syndrome	UNIPROT
	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 33	4700	DTO_05007624	NDUFA6	0,6	C4748840	Disease or Syndrome	UNIPROT
	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 2	4728	DTO_05007624	NDUFS8	0,6	C4748737	Disease or Syndrome	UNIPROT
	ARTERIAL CALCIFICATION, GENERALIZED, OF INFANCY, 1	5167	DTO_05007624	ENPP1	0,6	C4551985	Disease or Syndrome	UNIPROT
	CARDIOFACIOCUTANEOUS SYNDROME 4	5605	DTO_03300101	MAP2K2	0,6	C3809007	Disease or Syndrome	UNIPROT
moderate	MITOCHONDRIAL DNA DEPLETION SYNDROME 15 (HEPATOCEREBRAL TYPE)	7019		TFAM	0,6	C4310690	Disease or Syndrome	UNIPROT
	EMERY-DREIFUSS MUSCULAR DYSTROPHY 7, AUTOSOMAL DOMINANT	79188		TMEM43	0,6	C3553060	Disease or Syndrome	UNIPROT
limited	Sacral defect and anterior sacral meningocele	81839		VANGL1	0,6	C1838568	Disease or Syndrome	UNIPROT
limited	NEURAL TUBE DEFECTS, SUSCEPTIBILITY TO	81839		VANGL1	0,6	C3891448	Finding	UNIPROT
limited	LIPODYSTROPHY, PARTIAL, ACQUIRED, SUSCEPTIBILITY TO	84823		LMNB2	0,5	C3887501	Finding	UNIPROT
	Malignant neoplasm of breast	65125	DTO_03300101	WNK1	0,39	C0006142	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	65125	DTO_03300101	WNK1	0,39	C0009402	Neoplastic Process	UNIPROT
	Adenocarcinoma of lung (disorder)	65125	DTO_03300101	WNK1	0,34	C0152013	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	25836	DTO_05007557	NIPBL	0,31	C0006142	Neoplastic Process	UNIPROT
	Squamous cell carcinoma of lung	55589	DTO_03300101	BMP2K	0,3	C0149782	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	84823		LMNB2	0,3	C0009402	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	91807	DTO_03300101	MYLK3	0,3	C0009402	Neoplastic Process	UNIPROT
	SPINOCEREBELLAR ATAXIA 28	10939	DTO_05007624	AFG3L2	1	C1853249	Disease or Syndrome	UNIPROT
definitive	Adrenoleukodystrophy	215	DTO_05007405	ABCD1	1	C0162309	Disease or Syndrome	UNIPROT
	Malignant neoplasm of ovary	1499		CTNNB1	0,9	C1140680	Neoplastic Process	UNIPROT

Table SII. Continuation.

	Medulloblastoma	1499		CTNNB1	0,8	C0025149	Neoplastic Process	UNIPROT
	Pilomatrixoma	1499		CTNNB1	0,8	C0206711	Neoplastic Process	UNIPROT
strong	Liver carcinoma	1499		CTNNB1	0,8	C2239176	Neoplastic Process	UNIPROT
	Isaacs syndrome	3094	DTO_05007624	HINT1	0,8	C0242287	Disease or Syndrome	UNIPROT
definitive	MENTAL RETARDATION, X-LINKED, SNYDER-ROBINSON TYPE	6611		SMS	0,8	C0796160	Disease or Syndrome	UNIPROT
	CHARCOT-MARIE-TOOTH DISEASE, AXONAL, TYPE 2B (disorder)	7879		RAB7A	0,8	C1833219	Disease or Syndrome	UNIPROT
	Leukoencephalopathy with Brainstem and Spinal Cord Involvement and Lactate Elevation	55157	DTO_05007624	DARS2	0,78	C1970180	Disease or Syndrome	UNIPROT
	Phosphoserine Aminotransferase Deficiency	29968		PSAT1	0,71	C1970253	Disease or Syndrome	UNIPROT
	SPASTIC ATAXIA 5, AUTOSOMAL RECESSIVE	10939	DTO_05007624	AFG3L2	0,7	C3280977	Disease or Syndrome	UNIPROT
	Colorectal Carcinoma	1499		CTNNB1	0,7	C0009402	Neoplastic Process	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 19	1499		CTNNB1	0,7	C3554449	Disease or Syndrome	UNIPROT
	SPINOCEREBELLAR ATAXIA 26	1938	DTO_05007624	EEF2	0,7	C1836395	Disease or Syndrome	UNIPROT
strong	Cornelia de Lange Syndrome 1	25836	DTO_05007557	NIPBL	0,7	C4551851	Disease or Syndrome	UNIPROT
strong	MENTAL RETARDATION, X-LINKED 3	3054		HCFC1	0,7	C0796208	Disease or Syndrome	UNIPROT
strong	AMYOTROPHIC LATERAL SCLEROSIS 18	5216		PFN1	0,7	C3553719	Disease or Syndrome	UNIPROT
strong	CUTIS LAXA, AUTOSOMAL RECESSIVE, TYPE IID	523	DTO_05007405	ATP6V1A	0,7	C4479409	Disease or Syndrome	UNIPROT
	Diamond-Blackfan Anemia 5	6165	DTO_05007557	RPL35A	0,7	C2675859	Disease or Syndrome	UNIPROT
	IMMUNODEFICIENCY 46	7037	DTO_05007624	TFRC	0,7	C4225219	Disease or Syndrome	UNIPROT
limited	EPILEPSY, PROGRESSIVE MYOCLONIC, 9	84823		LMNB2	0,7	C4225289	Disease or Syndrome	UNIPROT
	PEROXISOME BIOGENESIS DISORDER 10A (ZELLWEGER)	8504		PEX3	0,7	C3553999	Disease or Syndrome	UNIPROT
strong	PEROXISOME BIOGENESIS DISORDER 10B	8504		PEX3	0,7	C4479254	Disease or Syndrome	UNIPROT
	COMBINED OXIDATIVE PHOSPHORYLATION DEFICIENCY 25	92935	DTO_05007624	MARS2	0,7	C4225329	Disease or Syndrome	UNIPROT

Table SII. Continuation.

strong	NEU-LAXOVA SYNDROME 2	29968		PSAT1	0,61	C4015019	Disease or Syndrome	UNIPROT
strong	EXUDATIVE VITREORETINOPATHY 7	1499		CTNNB1	0,6	C4539767	Disease or Syndrome	UNIPROT
strong	EPILEPTIC ENCEPHALOPATHY, INFANTILE OR EARLY CHILDHOOD, 3	523	DTO_05007405	ATP6V1A	0,6	C4693934	Disease or Syndrome	UNIPROT
strong	DEVELOPMENTAL DELAY, INTELLECTUAL DISABILITY, OBESITY, AND DYSMORPHIC FEATURES	55023	DTO_05007378	PHIP	0,6	C4693860	Disease or Syndrome	UNIPROT
	MENTAL RETARDATION, AUTOSOMAL RECESSIVE 14	9524	DTO_05007624	TECR	0,6	C3151462	Disease or Syndrome	UNIPROT
	MENTAL RETARDATION, AUTOSOMAL RECESSIVE 50	80153		EDC3	0,5	C4225319	Mental or Behavioral Dysfunction	UNIPROT
limited	LIPODYSTROPHY, PARTIAL, ACQUIRED, SUSCEPTIBILITY TO	84823		LMNB2	0,5	C3887501	Finding	UNIPROT
	Malignant neoplasm of breast	4810		NHS	0,4	C0006142	Neoplastic Process	UNIPROT
	INTELLECTUAL DEVELOPMENTAL DISORDER, AUTOSOMAL RECESSIVE 67	8665	DTO_05007624	EIF3F	0,4	C4749019	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	6950	DTO_05007613	TCP1	0,32	C0006142	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	8021	DTO_05007557	NUP214	0,32	C0006142	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	25836	DTO_05007557	NIPBL	0,31	C0006142	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	55023	DTO_05007378	PHIP	0,3	C0009402	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	8087	DTO_05007557	FXR1	0,3	C0006142	Neoplastic Process	UNIPROT
	Colorectal Carcinoma	84823		LMNB2	0,3	C0009402	Neoplastic Process	UNIPROT
	L-2-HYDROXYGLUTARIC ACIDURIA	79944	DTO_05007624	L2HGDH	1	C1855995	Disease or Syndrome	UNIPROT
moderate	FRONTOTEMPORAL LOBAR DEGENERATION WITH TDP43 INCLUSIONS, GRN-RELATED	2896		GRN	0,98	C1843792	Disease or Syndrome	UNIPROT
definitive	Guanidinoacetate methyltransferase deficiency	2593		GAMT	0,94	C0574080	Disease or Syndrome	UNIPROT
	NEURONAL CEROID LIPOFUSCINOSIS DUE TO CATHEPSIN D DEFICIENCY	1509	DTO_05007624	CTSD	0,93	C1864669	Disease or Syndrome	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
	SPINOCEREBELLAR ATAXIA, AUTOSOMAL RECESSIVE 9	56997	DTO_03300101	COQ8A	0,9	C2677589	Disease or Syndrome	UNIPROT
strong	Papillon-Lefevre Disease	1075	DTO_05007624	CTSC	0,8	C0030360	Disease or Syndrome	UNIPROT

Table SII. Continuation.

definitive	Pleuropulmonary blastoma	23405	DTO_05007624	DICER1	0,8	C1266144	Neoplastic Process	UNIPROT
	Congenital disorder of glycosylation type 1A	5373	DTO_05007624	PMM2	0,8	C0349653	Disease or Syndrome	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT
	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
strong	Telangiectasia, Hereditary Hemorrhagic, Type 1	2022		ENG	0,76	C4551861	Disease or Syndrome	UNIPROT
definitive	Arginine:Glycine Amidinotransferase Deficiency	2628		GATM	0,76	C2675179	Disease or Syndrome	UNIPROT
	Microcephaly-capillary malformation syndrome	10617	DTO_05007624	STAMBP	0,75	C3280296	Disease or Syndrome	UNIPROT
strong	HAIM-MUNK SYNDROME	1075	DTO_05007624	CTSC	0,75	C1855627	Disease or Syndrome	UNIPROT
	Pyridoxamine 5-Prime-Phosphate Oxidase Deficiency	55163	DTO_05007624	PNPO	0,71	C1864723	Disease or Syndrome	UNIPROT
	Heterotopia, Periventricular, Autosomal Recessive	10564		ARFGEF2	0,7	C1842563	Disease or Syndrome	UNIPROT
strong	Periodontitis, Aggressive, 1	1075	DTO_05007624	CTSC	0,7	C4551681	Disease or Syndrome	UNIPROT
	COENZYME Q10 DEFICIENCY, PRIMARY, 6	51004	DTO_05007624	COQ6	0,7	C3553349	Disease or Syndrome	UNIPROT
	COENZYME Q10 DEFICIENCY, PRIMARY, 7	51117		COQ4	0,7	C4225392	Disease or Syndrome	UNIPROT
	LEUKODYSTROPHY, HYPOMYELINATING, 13	51501		HIKESHI	0,7	C4225170	Disease or Syndrome	UNIPROT
strong	LIVER FAILURE, INFANTILE, TRANSIENT	55687		TRMU	0,7	C3278664	Disease or Syndrome	UNIPROT
	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
strong	Euthyroid Goiter	23405	DTO_05007624	DICER1	0,61	C0302859	Disease or Syndrome	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 56	1213	DTO_05007405	CLTC	0,6	C4693389	Mental or Behavioral Dysfunction	UNIPROT
	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 20	28976	DTO_05007624	ACAD9	0,6	C4747517	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 2	4728	DTO_05007624	NDUFS8	0,6	C4748737	Disease or Syndrome	UNIPROT
moderate	MITOCHONDRIAL DNA DEPLETION SYNDROME 15 (HEPATOCEREBRAL TYPE)	7019		TFAM	0,6	C4310690	Disease or Syndrome	UNIPROT

Table SII. Continuation.

strong	MULTIPLE MITOCHONDRIAL DYSFUNCTIONS SYNDROME 5	81689		ISCA1	0,6	C4539919	Disease or Syndrome	UNIPROT
limited	Sacral defect and anterior sacral meningocele	81839		VANGL1	0,6	C1838568	Disease or Syndrome	UNIPROT
limited	NEURAL TUBE DEFECTS, SUSCEPTIBILITY TO	81839		VANGL1	0,6	C3891448	Finding	UNIPROT
	GLOBAL DEVELOPMENTAL DELAY, LUNG CYSTS, OVERGROWTH, AND WILMS TUMOR	23405	DTO_05007624	DICER1	0,51	C4748924	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	9564		BCAR1	0,4	C0006142	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	10564		ARFGEF2	0,33	C0006142	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	51361	DTO_05007584	HOOK1	0,3	C0006142	Neoplastic Process	UNIPROT
	Squamous cell carcinoma of lung	55589	DTO_03300101	BMP2K	0,3	C0149782	Neoplastic Process	UNIPROT
	Gastric Adenocarcinoma	9201	DTO_03300101	DCLK1	0,3	C0278701	Neoplastic Process	UNIPROT
	SPINOCEREBELLAR ATAXIA 28	10939	DTO_05007624	AFG3L2	1	C1853249	Disease or Syndrome	UNIPROT
definitive	Adrenoleukodystrophy	215	DTO_05007405	ABCD1	1	C0162309	Disease or Syndrome	UNIPROT
moderate	FRONTOTEMPORAL LOBAR DEGENERATION WITH TDP43 INCLUSIONS, GRN-RELATED	2896		GRN	0,98	C1843792	Disease or Syndrome	UNIPROT
	NEURONAL CEROID LIPOFUSCINOSIS DUE TO CATHEPSIN D DEFICIENCY	1509	DTO_05007624	CTSD	0,93	C1864669	Disease or Syndrome	UNIPROT
strong	MENTAL RETARDATION, X-LINKED 41	2664	DTO_05007624	GDI1	0,9	C3887939	Disease or Syndrome	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
	SPINOCEREBELLAR ATAXIA, AUTOSOMAL RECESSIVE 9	56997	DTO_03300101	COQ8A	0,9	C2677589	Disease or Syndrome	UNIPROT
	X-Linked Emery-Dreifuss Muscular Dystrophy	2010		EMD	0,8	C0751337	Disease or Syndrome	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT
	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
	Leukoencephalopathy with Brainstem and Spinal Cord Involvement and Lactate Elevation	55157	DTO_05007624	DARS2	0,78	C1970180	Disease or Syndrome	UNIPROT
	Spinocerebellar ataxia type 38	60481	DTO_05007624	ELOVL5	0,74	C4518337	Disease or Syndrome	UNIPROT
	AMYOTROPHIC LATERAL SCLEROSIS 8 (disorder)	9217	DTO_05007405	VAPB	0,73	C1837728	Disease or Syndrome	UNIPROT
	EVEN-PLUS SYNDROME	3313		HSPA9	0,72	C4225180	Disease or Syndrome	UNIPROT

Table SII. Continuation.

	SPASTIC ATAXIA 5, AUTOSOMAL RECESSIVE	10939	DTO_05007624	AFG3L2	0,7	C3280977	Disease or Syndrome	UNIPROT
strong	AMYOTROPHIC LATERAL SCLEROSIS 18	5216		PFN1	0,7	C3553719	Disease or Syndrome	UNIPROT
	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
	IMMUNODEFICIENCY 46	7037	DTO_05007624	TFRC	0,7	C4225219	Disease or Syndrome	UNIPROT
	PEROXISOME BIOGENESIS DISORDER 10A (ZELLWEGER)	8504		PEX3	0,7	C3553999	Disease or Syndrome	UNIPROT
strong	PEROXISOME BIOGENESIS DISORDER 10B	8504		PEX3	0,7	C4479254	Disease or Syndrome	UNIPROT
	COMBINED OXIDATIVE PHOSPHORYLATION DEFICIENCY 25	92935	DTO_05007624	MARS2	0,7	C4225329	Disease or Syndrome	UNIPROT
strong	MENTAL RETARDATION, AUTOSOMAL DOMINANT 56	1213	DTO_05007405	CLTC	0,6	C4693389	Mental or Behavioral Dysfunction	UNIPROT
strong	MITOCHONDRIAL COMPLEX I DEFICIENCY, NUCLEAR TYPE 18	25915		NDUFAF3	0,6	C4748790	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	ANEMIA, SIDEROBLASTIC, 4	3313		HSPA9	0,6	C4225428	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	5245		PHB	0,6	C0006142	Neoplastic Process	UNIPROT
strong	MULTIPLE MITOCHONDRIAL DYSFUNCTIONS SYNDROME 5	81689		ISCA1	0,6	C4539919	Disease or Syndrome	UNIPROT
moderate	SPINAL MUSCULAR ATROPHY, LATE-ONSET, FINKEL TYPE	9217	DTO_05007405	VAPB	0,6	C1854058	Disease or Syndrome	UNIPROT
	Colorectal Carcinoma	3980	DTO_05007624	LIG3	0,31	C0009402	Neoplastic Process	UNIPROT
	Malignant neoplasm of breast	11194	DTO_05007405	ABCB8	0,3	C0006142	Neoplastic Process	UNIPROT
	SPINOCEREBELLAR ATAXIA 46	23646		PLD3	0,3	C4540404	Disease or Syndrome	UNIPROT
definitive	Glycogen storage disease type II	2548	DTO_05007624	GAA	1	C0017921	Disease or Syndrome	UNIPROT
	NEURONAL CEROID LIPOFUSCINOSIS DUE TO CATHEPSIN D DEFICIENCY	1509	DTO_05007624	CTSD	0,93	C1864669	Disease or Syndrome	UNIPROT
	Alzheimer disease, familial, type 3	5663	DTO_05007624	PSEN1	0,9	C1843013	Disease or Syndrome	UNIPROT
	Pick Disease of the Brain	5663	DTO_05007624	PSEN1	0,8	C0236642	Disease or Syndrome	UNIPROT
	Frontotemporal dementia	5663	DTO_05007624	PSEN1	0,8	C0338451	Disease or Syndrome	UNIPROT
	CHARCOT-MARIE-TOOTH DISEASE, AXONAL, TYPE 2B (disorder)	7879		RAB7A	0,8	C1833219	Disease or Syndrome	UNIPROT
	EVEN-PLUS SYNDROME	3313		HSPA9	0,72	C4225180	Disease or Syndrome	UNIPROT
	Dystonia, Dopa-Responsive, due to Sepiapterin Reductase Deficiency	6697		SPR	0,71	C0268468	Disease or Syndrome	UNIPROT

Table SII. Continuation.

	Cardiomyopathy, Dilated, 1u	5663	DTO_05007624	PSEN1	0,7	C3160720	Disease or Syndrome	UNIPROT
moderate	LOPES-MACIEL-RODAN SYNDROME	3064		HTT	0,6	C4479491	Disease or Syndrome	UNIPROT
	ANEMIA, SIDEROBLASTIC, 4	3313		HSPA9	0,6	C4225428	Disease or Syndrome	UNIPROT
	Malignant neoplasm of breast	5245		PHB	0,6	C0006142	Neoplastic Process	UNIPROT
moderate	MITOCHONDRIAL DNA DEPLETION SYNDROME 15 (HEPATOCEREBRAL TYPE)	7019		TFAM	0,6	C4310690	Disease or Syndrome	UNIPROT
	MITOCHONDRIAL COMPLEX III DEFICIENCY, NUCLEAR TYPE 8	90624		LYRM7	0,6	C4014440	Disease or Syndrome	UNIPROT
	Isaacs syndrome	3094	DTO_05007624	HINT1	0,8	C0242287	Disease or Syndrome	UNIPROT
	Phosphoserine Aminotransferase Deficiency	29968		PSAT1	0,71	C1970253	Disease or Syndrome	UNIPROT
strong	NEU-LAXOVA SYNDROME 2	29968		PSAT1	0,61	C4015019	Disease or Syndrome	UNIPROT

Table SIV. Interatome analysis of proteins in Vero cell infected with Zika virus.

Number of Degree	Betweenness	Gene name	Expression	MCODE_Cluster
82	16256,54	HSPA8	Down	Cluster 1
79	29009,48	GAPDH	Up	Cluster 3
79	5602,814	EIF4A3	Up	Cluster 1
75	9353,296	EEF2	Up	Cluster 2
72	4545,546	RPS3	Up	Cluster 3
71	4177,665	RPL4	Up	Cluster 3
67	6613,138	DHX15	Up	Cluster 1
64	3118,184	RPS9	Up	Cluster 3
62	4938,078	RPL5	Down	Cluster 3
62	4397,587	NOP56	Up	Cluster 3
62	3691,591	EFTUD2	Up	Cluster 1
62	2623,638	SKIV2L2/MTREX	Up	Cluster 1
60	2808,301	RPL8	Up	Cluster 3
57	2886,528	PDCD11	Up	Cluster 3
55	2362,84	RPS7	Up	Cluster 2
55	1294,212	RPS4X	Up	Cluster 3
54	6673,507	CCT8	Up	Cluster 2
52	3438,821	HNRNPK	Down	Cluster 1
52	2184,426	PTBP1	Up	Cluster 1
51	1135,408	RPS28	Up	Cluster 2

Table SIV. Top 20 major numbers proteins identified in Vero cell infected with Zika virus of degree related to disease markers.

Gene name	Log 2 FC	Associated diseases Malacards
HSPA8	-11,72544588	Auditory System Disease; Oral Lichen Planus; Mucolipidosis; Primary Hyperoxaluria; Sleeping Sickness; Ischemia; Mental Retardation, Autosomal Dominant 56; Parkinson Disease, Late-Onset; Sensorineural Hearing Loss; Cataract 8, Multiple Types; Cystic Fibrosis; Heart Disease; Colorectal Cancer; Myocardial Infarction; Alzheimer Disease; Muscular Dystrophy; Stroke, Ischemic; Schizophrenia; Leukemia, Chronic Myeloid; Myopathy; Dystonia; Diabetes Mellitus, Noninsulin-Dependent.
GAPDH	11,70650368	Schistosomiasis; Huntington Disease; Alzheimer Disease; Dentatorubral-Pallidoluysian Atrophy; Osteochondritis Dissecans; Bone Cancer; Sleeping Sickness; Keratopathy; Alcoholic Liver Cirrhosis; Angioimmunoblastic T-Cell Lymphoma; Myoglobinuria; Liver Cirrhosis; Malaria; Cervical Adenocarcinoma; Polyomavirus-Associated Nephropathy; Endocarditis; Autosomal Dominant Polycystic Kidney Disease; Kaufman Oculocerebrofacial Syndrome; Heart Disease; Muscular Atrophy; Cataract 34, Multiple Types; Cataract 4, Multiple Types; Pelizaeus-Merzbacher Disease; Retinitis Pigmentosa 11, 23, 24; Drug-Induced Lupus Erythematosus; Bladder Cancer; Kagami-Ogata Syndrome; Thyroid Gland Cancer; Colorectal Cancer; Thymoma; Maturity-Onset Diabetes Of The Young; Ovarian Disease; Hypotrichosis 1; Neurofibromatosis, Type II; Macular Degeneration, Age-Related, 1; Intraocular Pressure Quantitative Trait Locus; Hepatocellular Carcinoma; Lens Disease; Dilated Cardiomyopathy; Mantle Cell Lymphoma; Diffuse Idiopathic Skeletal Hyperostosis; Actinomycosis; Loeys-Dietz Syndrome 2; Pancreatic Cancer; Breast Cancer; Vascular Disease; Prostate Cancer; Pancreatic Adenocarcinoma; Cardiomyopathy, Familial Hypertrophic, 2; Autosomal Genetic Disease; Autonomic Nervous System Neoplasm; Leukemia, Acute Monocytic; X-Linked Recessive Disease; Amyotrophic Lateral Sclerosis 1; Suppression Of Tumorigenicity 12; Ovarian Cancer; Contractures, Pterygia, And Spondylocarpotarsal Fusion Syndrome 1A; Hypomyelinating Leukodystrophy; Peripheral Nervous System Neoplasm; Hantavirus Hemorrhagic Fever With Renal Syndrome; X-Linked Monogenic Disease; Diaphragmatic Hernia, Congenital; Diabetes Mellitus; Cerebral Degeneration; Koolen-De Vries Syndrome; Tongue Disease; Palmoplantar Keratoderma, Bothnian Type; Ovary Adenocarcinoma; Lung Cancer; Toxic Encephalopathy; Metachromatic Leukodystrophy; Neuroblastoma; Malignant Ovarian Surface Epithelial-Stromal Neoplasm; Asthma; Ovary Epithelial Cancer; Hypertension, Essential; Hereditary Lymphedema I; Hair Disease; Leukemia, Chronic Myeloid; Schizophrenia; Cervix Carcinoma; Loeys-Dietz Syndrome; Ovarian Cystadenocarcinoma; Eye Degenerative Disease; Mycobacterium Tuberculosis 1; Lung Cancer Susceptibility 3; Wilson-Turner X-Linked Mental Retardation Syndrome; Cervical Cancer; Spinal Disease; Rectum Adenocarcinoma; Integumentary System Disease; Ectodermal Dysplasia 10B, Hypohidrotic/Hair/Tooth Type, Autosomal Recessive; Plantar Fascial Fibromatosis; Inflammatory Bowel Disease; Noonan Syndrome 1; Myocardial Infarction; Peripheral Nervous System Disease; Muscular Disease; Body Mass Index Quantitative Trait Locus 11; Immune Deficiency Disease; Specific Developmental Disorder; Distal Arthrogryposis; Combined T Cell And B Cell Immunodeficiency; Ovarian Serous Cystadenocarcinoma; Parkinson Disease, Late-Onset; Hereditary Spherocytosis; Eye Disease; Renal Cell Carcinoma, Nonpapillary; Pulmonary Fibrosis, Idiopathic; Myeloma, Multiple; Neuromuscular Disease; Bladder Urothelial Carcinoma; Cone-Rod Dystrophy 2; Odontochondrodysplasia; Congenital Myasthenic Syndrome; Lymphoma, Non-Hodgkin, Familial; Leukemia, Acute Myeloid; Wilms Tumor 1; Pervasive Developmental Disorder; Autosomal Recessive Congenital Ichthyosis; Squamous Cell Carcinoma, Head And Neck; Leber Plus Disease; Diabetes Mellitus, Noninsulin-Dependent; Leukemia, Chronic Lymphocytic; Fundus Dystrophy; Fundus Dystrophy; Charcot-Marie-Tooth Disease.
EIF4A3	0,898876669	Robin Sequence With Cleft Mandible And Limb Anomalies; Schopf-Schulz-Passarge Syndrome; Thrombocytopenia-Absent Radius Syndrome; Mandibulofacial Dysostosis, Guion-Almeida Type; Cardiomyopathy, Familial Restrictive, 2; Acrofacial Dysostosis; Learning Disability.

Table SIV. Continuation.

EEF2	0,757435024	Spinocerebellar Ataxia 26, Spinocerebellar Ataxia 30; Diphtheria; Myotonic Dystrophy 2; Subacute Glomerulonephritis; Refractory Hematologic Cancer; Refractory Hairy Cell Leukemia; Ischemia; Trachea Carcinoma; Fusariosis; Tuberous Sclerosis; Hereditary Ataxia; Exocervical Carcinoma.
RPS3	0,770869912	Waardenburg Syndrome, Type 3; Eumycotic Mycetoma; Atrial Septal Defect 4; Retinitis Pigmentosa, Retinitis Pigmentosa 49; Hereditary Spherocytosis; Diamond-Blackfan Anemia.
RPL4	0,517009533	Babesiosis; Diamond-Blackfan Anemia.
DHX15	0,422997312	Chromosome 4P Deletion; Wolf-Hirschhorn Syndrome.
RPS9	0,479702044	Takayasu Arteritis; Diamond-Blackfan Anemia.
RPL5	-0,442346567	Diamond-Blackfan Anemia, Diamond-Blackfan Anemia 1, Diamond-Blackfan Anemia 6; Hemangioma; Atrial Heart Septal Defect; Interatrial Communication; Pulmonary Hypertension, Primary, 1; Aplastic Anemia; Macrocytic Anemia; Skin Hemangioma; Shwachman-Diamond Syndrome 1; Treacher Collins Syndrome 1; Hydrocele; T-Cell Acute Lymphoblastic Leukemia; Dyskeratosis Congenita, X-Linked; Dyskeratosis Congenita; Orofacial Cleft.
NOP56	0,442670832	Spinocerebellar Ataxia 8, 10, 29, 30, 31, 36, 37; Hereditary Ataxia; X-Linked Hereditary Ataxia; Huntington Disease-Like 2; Fragile X-Associated Tremor/Ataxia Syndrome; Myotonic Dystrophy 2; Autosomal Dominant Cerebellar Ataxia; Treacher Collins Syndrome 1; Cerebellar Disease; Frontotemporal Dementia And/Or Amyotrophic Lateral Sclerosis 1; Fuchs' Endothelial Dystrophy; Dyskeratosis Congenita; Diamond-Blackfan Anemia;
EFTUD2	0,209209092	Mandibulofacial Dysostosis, Guion-Almeida Type; Tracheoesophageal Fistula With Or Without Esophageal Atresia; Dysostosis; Esophageal Atresia; Microcephaly; Choanal Atresia, Posterior; Treacher Collins Syndrome 1; Acrofacial Dysostosis 1, Nager Type; Postaxial Acrofacial Dysostosis; Short-Rib Thoracic Dysplasia 5 With Or Without Polydactyly; Retinitis Pigmentosa 13, 33, 57; Acrofacial Dysostosis; Hemifacial Microsomia; Cerebrocostomandibular Syndrome; Sengers Syndrome; Charge Syndrome; Cleft Palate, Isolated; Coloboma Of Macula.
SKIV2L2/ MTREX	13,04468423	Posterior Myocardial Infarction; Robinow Syndrome, Autosomal Dominant 1; Robinow Syndrome; Renal Dysplasia, Cystic.
RPL8	12,95139125	Spermatogenic Failure 1, 2; Exocervical Carcinoma; Renal Dysplasia, Cystic
PDCD11	0,374619413	Autosomal Dominant Non-Syndromic Intellectual Disability 1; Echinostomiasis; Epididymo-Orchitis; Robinow Syndrome, Autosomal Dominant 1;
RPS7	1,103654515	Diamond-Blackfan Anemia 8
RPS4X	13,34260547	Turner Syndrome; Diamond-Blackfan Anemia
CCT8	12,56282877	Dysbaric Osteonecrosis
HNRNPK	-0,441976115	Au-Kline Syndrome; Neurodevelopmental Disorder-Craniofacial Dysmorphism-Cardiac Defect-Skeletal Anomalies Syndrome Due To 9Q21.3 Microdeletion; Spinocerebellar Ataxia 10; Stomatitis; Fragile X Syndrome; Melanomatosis; Hepatitis C Virus; Ptosis; Breast Cancer; Aplastic Anemia.
PTBP1	0,893725006	Human T-Cell Leukemia Virus Type 2; Congenital Myasthenic Syndrome; Mouth Disease; Frontotemporal Dementia; Atrial Septal Defect 1; Hydrocephalus; Endometrial Stromal Sarcoma; Myopathy; Familial Febrile Seizures.
RPS28	0,497517063	Diamond-Blackfan Anemia 15 With Mandibulofacial Dysostosis; Diamond-Blackfan Anemia; Dysostosis; Macrocytic Anemia; Chromosome 5Q Deletion Syndrome; Erythrasma; Shwachman-Diamond Syndrome 1.

Table SV. Genes and related pathways.

Gene name	Related Pathways
HSPA8	Protein processing in endoplasmic reticulum; Spliceosome; MAPK signaling pathway; Endocytosis; Longevity regulating pathway - multiple species; Antigen processing and presentation; Estrogen signaling pathway; Prion disease; Legionellosis; Toxoplasmosis; Measles; Lipid and atherosclerosis;
GAPDH	Metabolic pathways; Carbon metabolism; Biosynthesis of amino acids; Glycolysis / Gluconeogenesis; HIF-1 signaling pathway; Pathogenic Escherichia coli infection; Salmonella infection; Alzheimer disease; Diabetic cardiomyopathy;
EIF4A3	RNA transport; mRNA surveillance pathway; Spliceosome;
EEF2	Oxytocin signaling pathway; AMPK signaling pathway;
RPS3	Ribosome; Coronavirus disease - COVID-19; Pathogenic Escherichia coli infection; Salmonella infection;
RPL4	Ribosome; Coronavirus disease - COVID-19; Pathogenic Escherichia coli infection; Salmonella infection;
DHX15	Spliceosome;
RPS9	Ribosome; Coronavirus disease - COVID-19;
RPL5	Ribosome; Coronavirus disease - COVID-19;
NOP56	Ribosome biogenesis in eukaryotes; Spinocerebellar ataxia;
EFTUD2	Spliceosome;
SKIV2L2/MTREX	RNA degradation;
RPL8	Ribosome; Coronavirus disease - COVID-19;
PDCD11	No pathway related
RPS7	Ribosome; Coronavirus disease - COVID-19;
RPS4X	Ribosome; Coronavirus disease - COVID-19;
CCT8	No pathway related
HNRNPK	Spliceosome; Viral carcinogenesis; MicroRNAs in cancer;
PTBP1	No pathway related
RPS28	Ribosome; Coronavirus disease - COVID-19;

Table SVI. Pathways most affected pathways within the proteomic alteration evidenced in Vero cell infected with Zika virus the according to Disgenet.

Term	Count	%	PValue	Genes	Fold Enrichment	Bonferroni	Benjamini	FDR
hsa03040:Spliceosome	21	3,553299	5,07E-07	HSPA8, SF3B5, SF3B3, EIF4A3, U2AF1, HSPA2, LSM5, CRNKL1, LSM3, EFTUD2, SNRNP40, RBMXL1, HNRNPK, SNW1, ZMAT2, DHX15, DHX16, SNRNP200, SRSF10, RBMX, CTNNBL1	3,771382	1,17E-04	1,17E-04	1,17E-04
hsa03010:Ribosome	19	3,21489	1,22E-05	RPL4, RPL5, MRPS15, RPS9, RPS7, MRPL27, RPL35A, MRPS21, MRPL14, RPSA, MRPL23, RPL8, MRPL13, MRPS5, MRPL32, RPS4X, RPS25, RPS28, RPS3	3,336933	0,002805	0,001405	0,001399
hsa04141:Protein processing in endoplasmic reticulum	18	3,045685	6,44E-04	PDIA3, BCAP31, HSPA8, TRAM1, SEC24A, RPN1, DERL2, HSPA2, RAD23B, PDIA4, LMAN1, ERP29, BCL2, UBQLN1, SSR1, UGGT2, UBXN6, SKP1	2,544009	0,13828	0,049592	0,049378
hsa03013:RNA transport	16	2,707276	0,005307	RANBP2, NUP214, EIF4A1, CYFIP1, NUP205, NUP133, PABPC4, EIF4A3, FXR1, XPO5, TPR, EIF3G, SAP18, NUP43, EIF3F, EIF3A	2,221899	0,707498	0,306505	0,305178
hsa03050:Proteasome	7	1,184433	0,009291	PSMA5, PSMD7, PSMC3, PSMA2, PSMC1, PSMB1, PSME2	3,799953	0,884229	0,429223	0,427364
hsa04142:Lysosome	12	2,030457	0,011911	GM2A, ATP6AP1, LAMP1, GAA, CLTC, AP1S2, TCIRG1, GUSB, CTSD, ATP6V0D2, CTSC, CTSB	2,368802	0,937207	0,448294	0,446353
hsa01212:Fatty acid metabolism	7	1,184433	0,014063	PECR, ELOVL5, EHHADH, TECR, ACSL3, ACADSB, ACAT2	3,48329	0,962056	0,448294	0,446353
hsa03030:DNA replication	6	1,015228	0,015927	PRIM2, FEN1, RFC3, MCM7, MCM4, MCM2	3,980903	0,975489	0,448294	0,446353
hsa01100:Metabolic pathways	66	11,16751	0,017668	ADPGK, MSMO1, TCIRG1, LCLAT1, SPR, UROD, NAPRT, ENPP1, MLYCD, GUSB, EARS2, GAMT, MCCC2, ATP6AP1, GAA, TALDO1, ACSL3, NME1, APRT, NDUFS8, EHHADH, CHDH, ALDH1A1, POLR1D, CMPK1, SMS, LAP3, GAPDH, ATP6V0D2, PLPP1, ATP6V1A, PRIM2, DTYMK, RPN1, ATP5J, TYMS, ATP5O, COX5A, CYP3A5, ACAT2, AGPAT3, PLD3, MTM1, RDH11, POLR2D, HSD17B2, PGK1, PNPO, NDUFA9, FDPS, RRM1, NDUFA6, PMM2, AKR1C3, GATB, SYNJ2, ACADSB, COQ6, SQLE, GALE, GATM, P4HA1, PSAT1, LPCAT4, ACO1, GCLM	1,293222	0,983721	0,448294	0,446353
hsa00970:Aminoacyl-tRNA biosynthesis	8	1,353638	0,019407	VARS, LARS, MARS2, GATB, DARS2, IARS, EARS2, FARSB	2,895202	0,989187	0,448294	0,446353
hsa04145:Phagosome	13	2,199662	0,022491	ATP6V1A, ITGB5, ATP6AP1, TFRC, TCIRG1, TUBB8, EEA1, DYNC1LI1, LAMP1, ITGA5, ATP6V0D2, RAB7A, VAMP3	2,070069	0,994778	0,47232	0,470276
hsa00240:Pyrimidine metabolism	10	1,692047	0,024597	PRIM2, RRM1, DTYMK, CANT1, PNPT1, POLR2D, POLR1D, CMPK1, TYMS, NME1	2,364893	0,996827	0,4735	0,47145
hsa03015:mRNA surveillance pathway	9	1,522843	0,035491	NUDT21, PCF11, PABPC4, EIF4A3, CSTF1, SAP18, SYMPK, ETF1, SMG6	2,362294	0,999763	0,630642	0,627912
hsa00190:Oxidative phosphorylation	11	1,861252	0,050703	NDUFA9, ATP6V1A, NDUFS8, NDUFA6, ATP6AP1, ATP5J, TCIRG1, ATP5O, COX5A, ATP6V0D2, LHPP	1,975486	0,999994	0,836602	0,83298
hsa01200:Carbon metabolism	9	1,522843	0,09904	PSAT1, ADPGK, EHHADH, PGK1, TALDO1, ACO1, ME2, GAPDH, ACAT2	1,902378	1	1	1

Table SVII. Metabolic pathways most affected pathways within the proteomic alteration evidenced in Vero cell infected with Zika virus.

Metabolic Pathway	nº Proteins	pvalue	FDR
Metabolism of lipids	21	5.23E-5	5.8E-3
Metabolism of carbohydrates	10	3.05E-4	1.48E-2
Metabolism of steroids	9	1.1E-4	8.1E-3
Metabolism of vitamins and cofactors	9	3.37E-4	1.48E-2
Phospholipid metabolism	8	4.9E-4	1.66E-2
The citric acid (TCA) cycle and respiratory electron transport	7	4.4E-4	1.66E-2
Metabolism of nucleotides	7	6.79E-4	1.83E-2
Interconversion of nucleotide di- and triphosphates	6	8.37E-6	1.86E-3
Respiratory electron transport, ATP synthesis by chemiosmotic coupling, and heat production by uncoupling proteins.	6	2.73E-4	1.48E-2
Iron uptake and transport	5	1.29E-4	8.1E-3
Glycolysis	5	4.66E-4	1.66E-2
Glucose metabolism	5	1.36E-3	3.13E-2
Insulin receptor recycling	4	2.35E-5	3.47E-3
Transferrin endocytosis and recycling	4	8.41E-5	7.4E-3
Synthesis of PA	4	5.8E-4	1.78E-2
Gluconeogenesis	4	6.13E-4	1.78E-2
Activation of gene expression by SREBF (SREBP)	4	8.03E-4	2.03E-2
Cholesterol biosynthesis	4	8.46E-4	2.03E-2
RA biosynthesis pathway	3	1.56E-3	3.44E-2