

Supplementary Table 2

A list of peptides spotted on peptide microarrays

	Protein	Accession	Wildtype peptide sequence	Mutant peptide sequence (containing a Y→F substitution)
1	Similar to splicing factor 3B subunit 2	XP_290506.3	AMTQKYEEHVR DVEIEYVTEEP EEPEIYEPNFI ERLQSYTRQTG GGSKKYKEFKF GPPPSYPNLKI GSTHIYDMSTV HGDLYYEGKEF IAMQRYGPPPS IHGDLYYEGKE KIDIDYQKLHD PPPGHYGAWAA TGKPLYGDVFG	AMTQKFEEHVR DVEIEFVTEEP EEPEIFEPNFI ERLQSFTRQTG GGSKKFKEFKF GPPPSFPNLKI GSTHIFDMSTV HGDLYFEGKEF IAMQRFGPPPS IHGDLFYEGKE KIDIDFQKLHD PPPGHFGAWAA TGKPLFGDVFG
2	Chromosome 19 open reading frame 7	NP_055983	AQRALYLRIQQ DDEFYDEDMG DDYDEYSKELN DEEDFYEEEMD DRYNSYNRPRP DTGNWYSSDED EDYGHYEELPG EEEMDYGESEE EQYGEYEGDEE EYSPPYAPFWP FYENFYQQQEG GGGGSYRSRDH GMYEDYENEQY	AQRALFLRIQQ DDEDFEDEDMG DDYDEFKELN DEEDFFEEEMD DRYNSFNPRP DTGNWFSSDED EDYGHFEELPG EEEMDFGESEE EQYGEFEGDEE EYSPPFAPFWP FYENFFQQQEG GGGGSFRSRDH GMYEDFENEQY

GRGRGYRGRGS	GRGRGFRGRGS
IAIEDYGHYEE	IAIEDFGHYEE
KELNQYRRSKD	KELNQFRRAKE
KELNQYRRSKD	KELNQFRRAKE
KGHRKYREYSP	KGHRKFREYSP
KSYGMYEDYEN	KSYGMFEDYEN
LAPFGYFRLPS	LAPFGFFRLPS
LPKKAYSKMDS	LPKKAFSKMDS
MDSKSYGMYED	MDSKSFMYED
MGDDDYDEYSK	MGDDDFDEYSK
MGKEDYDDFTK	MGKEDFDDFTK
MHDILYLDVHL	MHDILFLVDHL
MTLKKYREFLL	MTLKKFREFLL
PAQNFYENFYQ	PAQNFFENFYQ
PATAPYDPRVL	PATAPFDPRVL
PPASLYHTTGN	PPASLFHTTGN
PPMMPYGPADS	PPMMPFGPADS
QQQDMYNKKIP	QQQDMFNKKIP
RKYREYSPPYA	RKYREFSPPYA
SGISLYDP RTP	SGISLFDPRTP
TPTDRYNSYNR	TPTDRFNSYNR
TSHQQYPPSHA	TSHQQFPPSHA
YENEQYGEYEG	YENEQFGEYEG

3 Arsenate resistance protein ARS2 isoform b

NP_877952.1

AGRGNYDAFRG	AGRGNFDAFRG
DKLLLYLRIVH	DKLLLF LRIVH
EAVKRYNDYKL	EAVKRFNDYKL
GGGPTYGPPQP	GGGPTFGPPQP
GYEMPYAGGGG	GYEMPFAGGGG
HSSDPYHSGYE	HSSDPFHSGYE
KNITDYLIEEV	KNITDFLIEEV
KRYNDYKLD FR	KRYNDFKLD FR
PPILGYGAGAV	PPILGFGAGAV
PYHSGYEMPYA	PYHSGFEMPYA
QGLMPYGQPRP	QGLMPFGQPRP
RAIVEYRDLDA	RAIVEFRDLDA

		RGQGGYPGKPR	RGQGGFPGKPR
		TGGPPYPHAPY	TGGPPFPHAPY
		TPGLPYPHQTP	TPGLPFPHQTP
		WFRSKYHPDEV	WFRSKFHPDEV
		YPHAPYGAGRG	YPHAPFGAGRG
4	Ataxin 2 related protein isoform B	NP_663760.1	
		AVGRMYPPRSP	AVGRMFPPRSP
		ESSPQYRLRIA	ESSPQFRLRIA
		FNEENYGVKTT	FNEENFGVKTT
		GQQGKYRGAKG	GQQGKFRGAKG
		GQSGLYSPQYI	GQSGLFSPQYI
		GVKTTYDSSLS	GVKTFDSSLS
		KNGTTYEGIFK	KNGTFEGIFK
		LYSPQYISYIP	LYSPQFISYIP
		NVDFNYATKDK	NVDFNFATKDK
		PQMYPYPVSNS	PQMYPFPVSNS
		PQQNLYHPGAL	PQQNLFHPGAL
		PQYISYIPQIH	PQYISFIPQIH
		PSPYPYIGHPQ	PSPYFFIGHPQ
		QAPQMYPYPVS	QAPQMFYPVS
		QPAAVYAIHHQ	QPAAVFAIHHQ
		QPMAHYPSQPV	QPMAHFPSQPV
		SNSDDYDLESD	SNSDDFDLESD
		SREGKYIPLPQ	SREGKFIPLPQ
		SSLSSYTVPLE	SSLSSF TVPLE
		SSTPQYPSAEQ	SSTPQFPSAEQ
		SSYIPYNPQQF	SSYIPFNPQQF
		STPSPYPYIGH	STPSPFPYIGH
		TPQALYATVHQ	TPQALFATVHQ
		TPYSSYIPYNP	TPYSSFIPYNP
		TVHQSYPHHAT	TVHQSFPHHAT
		VAATPYSSYIP	VAATPFSSYIP
		VFEGVYNNSRM	VFEGVFNNSRM
5	Zinc finger, CCHC domain containing 8	NP_060082.2	
		AISKQYHQEIE	AISKQFHQEIE
		DVFANYLTSNF	DVFANFLTSNF
		ESTGMYLRIRS	ESTGMFLRIRS

LPPFIYRMRQL	LPPFIFRMRQL
MAAEVYFGDLE	MAAEVFFGDLE
MRQLGYPPGWL	MRQLGFPPGWL
NFQQRyhAEEV	NFQQRfHAEEV
NKsvTYDLSKL	NKsvTFDLSKL
SGLALYDGKDG	SGLALFDGKDG
SKLVNYPGFNI	SKLVNfPGFNI
WEIPKYHQVFS	WEIPKfHQVFS

6	TRK-fused Gene	NP_006061.2	EVTIKYKDEDG	EVTIKfKDEDG
			IEGQMYQQYQQ	IEGQMfQQYQQ
			NEDITYDELVL	NEDITfDELVL
			PFGQGYTQPGP	PFGQGfTQPGP
			PQQPPYTGAQT	PQQPPfTGAQT
			QGYTQPGPGYR	QGYTQPGPGfR
			QMYQQYQQQAG	QMYQQfQQQAG
			QPPQYQASNY	QPPQfQASNY
			QQFQGYGQQPT	QQFQGFQGPt
			QQPQQYGIQYS	QQPQQfGIQYS
			QQQAGYGAQQP	QQQAGfGAQQP
			QYGIQYSASYS	QYGIQfSASYS
			QYSASYSQQTG	QYSASfSQQTG
			SGPNPYARNRP	SGPNPfARNRP
			SQPGAYQPRPG	SQPGAfQPRPG
			SQPTNYTVAPA	SQPTNfTVAPA
			SSQVKYLRREL	SSQVKfLRREL
			YPAQTYTAQTS	YPAQTfTAQTS
			YQASNYPaQTY	YQASNfPaQTY

7	A-Kinase anchor protein 8	NP_005849.1	ASWQGYENYNY	ASWQGfENYNY
			EFLQEYIVNRN	EFLQEfIVNRN
			ENYNYYGAQNT	ENYNfYGAQNT
			GATYSYGPASW	GATYSfGPASW
			KMLEKYLKGED	KMLEKfLKGED
			KQFQLYEEPDT	KQFQLfEEPDT
			MDQGYGGYGAW	MDQGfGGYGAW
			NTQGAYGTGVA	NTQGAFGTGVA

			PEHNPYRPSYS	PEHNPFRRPSYS
			PYRPSYSYDYE	PYRPSFSYDYE
			QGAGGYDSTMP	QGAGGFDSTMP
			QGYENYNYGA	QGYENFNYYGA
			QGYGGYGAWSA	QGYGGFGAWSA
			RPSYSYDYEFD	RPSYSFDYEFD
			SMAPDYGVMGM	SMAPDFGVMGM
			SYSYDYEFDLG	SYSYDFEFDLG
			TTGATYSYGPA	TTGATFSYGPA
			WNELNYVGGRG	WNELNFVGGRG
			YENYNYGAQN	YENYNFYGAQN
8	Ras-GTPase-activating protein	NP_005745.1	DFEQSYGNVVE	DFEQSFGNVVE
			DSGTFYDQAVV	DSGTFFDQAVV
			EFVRQYYTLLN	EFVRQFYTLLN
			FVRQYYTLLNQ	FVRQYFTLLNQ
			GKNSSYVHGGL	GKNSSFVHGGL
			MLHRFYGKNSS	MLHRFFGKNSS
			NDIFRYQDEVF	NDIFRFQDEVF
			PADAVYGQKEI	PADAVFGQKEI
			VANKFYVHNDI	VANKFFVHNDI
9	RNA binding motif protein 10	NP_005667.2	AAPGIYQQSAE	AAPGIFQQSAE
			ANSQSYTIMSP	ANSQSFTIMSP
			AQSQQYLYWDG	AQSQQFLYWDG
			ARGSSYGVTST	ARGSSFVGTST
			DETSGYYYDPQ	DETSGFYYDPQ
			DPNSQYYNAQ	DPNSQFYNAQ
			DRTGRYGATDR	DRTGRFGATDR
			EGKHDYDDSSE	EGKHDFDDSSE
			EPPVDYSYYQQ	EPPVDFSYYQQ
			ERREKYGIPEP	ERREKFGIPEP
			ESYSQYPVPDV	ESYSQFPVPDV
			ETSGYYPDPQT	ETSGYFYDPQT
			GALAPYAVLSS	GALAPFAVLSS
			GERTYVPALE	GERTFVPALE
			GLVAAYSGESD	GLVAAFSGESD

KVSMHYSDPKP	KVSMHFSDPKP
LYAHGYLKGTK	LYAHGFLKGTK
MDYRSYPREYG	MDYRSFPREYG
MEYERRGGRGD	MEFERRGGRGD
MEQMKYRDRAA	MEQMKFRDRAA
NSQYYNAQSQ	NSQYFNAQSQ
PDVSTYQYDET	PDVSTFQYDET
PKRRKYGGIST	PKRRKFGGIST
PLPQPYQAQGV	PLPQPFQAQGV
PNSQYYNAQS	PNSQYFYNAQS
PQTGLYDPNS	PQTGLFYDPNS
PRDGDYRDQDY	PRDGDFRDQDY
PVDYSYQQDE	PVDYSFYQQDE
QQDEGYGNSQG	QQDEGFGNSQG
QTGLYDPNSQ	QTGLYFDPNSQ
SAEDSYEASPG	SAEDSFEASPG
SQQYLYWDGER	SQQYLFWDGER
SRDHDYRDMDY	SRDHDFRDMDY
SYPREYGSQEG	SYPREFGSQEG
TADAGYAILEK	TADAGFAILEK
TAQESYSQYPV	TAQESFSQYPV
TESSLYAHGYL	TESSLFAHGYL
TSGYYYDPQTG	TSGYYFDPQTG
TSTESYKETLH	TSTESFKETLH
VDYSYQQDEG	VDYSYFQQDEG
VSTYQYDETSQ	VSTYQFDETSQ
YRDMDYRSYPR	YRDMDFRSYPR
YRDQDYRTEQG	YRDQDFRTEQG

10 Thyroid hormone receptor-associated protein

NP_005110.1

AYTKRYLEEOK	AYTKRFLEEOK
ERFTKYLKRGT	ERFTKFLKRGT
FRRPYFRGRN	FRRPYFFRGRN
FRVTAYKAVQE	FRVTAFKAVQE
GGYGNYSNWQ	GGFGNFRSNWQ
GHNRYRRPYY	GHNRFRRPYY
GYRRPYFRGR	GYRRPFYFRGR

			KAEGKYKDDPV	KAEGKFKDDPV
			KSKKYFLHDDR	KSKKYFLHDDR
			NHPRVYQNRDF	NHPRVFQNRDF
			NYRQAYSPRRG	NYRQAFSPRRG
			PKSKKYFLHDD	PKSKKFYLHDD
			PREPGYKAEGK	PREPGFKAEGK
			PSGAGYQSGTH	PSGAGFQSGTH
			QSPKRYKLRDD	QSPKRFKLRDD
			QSSHSYKAEFY	QSSHSFKAEFY
			RNRGFYPWGQY	RNRGFFPWGQY
			SGGAAATKRYL	SGGAAF'TKRYL
			SNWQNYRQAYS	SNWQNFQAYS
			SRSRSYSPAHN	SRSRSFSPAHN
			STGSTYGSQK	STGSTFGSSQK
			WEGLVYAPPGK	WEGLVFAPPGK
			WGRGNYSNNN	WGRGNFSGNNN
			WPDATYGTGSA	WPDATF'GTGSA
			YKAEFYTEETE	YKAEFFTEETE
			YNRGGYGNYS	YNRGGF'GNYS
			YPWGQYNRGGY	YPWGQFNRGGY
			YRRPYFRGRN	FRRPYFRGRN
11	Splicing factor proline/glutamine rich	NP_005057.1	EMEDAYHEHQA	EMEDAFHEHQA
			GGGIGYEANPG	GGGIGFEANPG
			GTPAGYGRGRE	GTPAGFGRGRE
			HGTFEYEQSR	HGTFEFEYSQR
			NMGDPYGGGQ	NMGDPFGSGGQ
			QHHAPYHQHH	QHHAPFHQQHH
			QKNPMYQKERE	QKNPMFQKERE
			QREESYSRMGY	QREESFSRMGY
			RGREYEGPNK	RGREEFEGPNK
			RLFAKYGEPGE	RLFAKFGEPGE
			RNLSPYVSNEL	RNLSPFVSNEL
			TFEYEQSRWK	TFEYEF'QSRWK
			YSRMGYMDPRE	YSRMGFMDPRE
12	Far upstream element-binding protein	NP_003893.2	AAWAAYAHYY	AAWAIFYAHYY

AAWAEYYRQQA	AAWAEFYRQQA
AAWAEYFRQQA	AAWAEFFRQQA
AGQVDYTKAWE	AGQVDFTKAWE
AWAAYYAHYYQ	AWAAYFAHYYQ
AWAEYFRQQA	AWAEYFRQQA
AWAEYYRQQA	AWAEYYRQQA
AWEEYYKMGQ	AWEEYFKMGQ
AYYAHYYQQQA	AYYAHFYQQQA
EVRNEYGSRIG	EVRNEFGSRIG
GGQPDYSAAWA	GGQPDFSAAWA
GPPAPYAPQGW	GPPAPFAPQGW
GWGNAYPHWQQ	GWGNAPPHWQQ
ITGDPYKVQQA	ITGDPFKVQQA
KAWEEYYKMG	KAWEEFYKMG
LNSNDYGYGGQ	LNSNDFGYGGQ
MADYSTVPPPS	MADFSTVPPPS
PQQIDYARQLI	PQQIDFARQLI
QQAAYYAQTSP	QQAAFYAQTSP
RQQAAYYAQTS	RQQAIFYAQTS
SNDYGYGGQKR	SNDYGFGGQKR
TPMGPYNPAPY	TPMGPFNPAPY
VMTEEYKVPDG	VMTEEFKVPDG
YNPAPYNPGPP	YNPAPFNPGPP
YYAHYYQQQAQ	YYAHFYQQQAQ

13 KH-type splicing regulatory protein(FUSE-2)

NP_003676.1

AAWAAYSHY	AAWAAFYSHY
AWAAYSHYYQ	AWAAYFSHYQ
AWEEYKIGQ	AWEEYFKIGQ
AWEEYKQAQ	AWEEYFKQAQ
AYYSHYYQPP	AYYSHFYQPP
GDRNEYGSRIG	GDRNEFGSRIG
GSQPDYSAAWA	GSQPDFSAAWA
GWGNTYPQWQP	GWGNTFPQWQP
IIGDPYKVQQA	IIGDPFKVQQA
KAWEEYKIG	KAWEEFYKIG
KAWEEYKQA	KAWEEFYKQA

		MSDYSTGGPPP	MSDFSTGGPPP
		PPPHQYPPQGW	PPPHQFPPQGW
		PPQQDYTKAWE	PPQQDFTKAWE
		QQAAAYGQTPG	QQAAAYFGQTPG
		RQQAAYYGQTP	RQQAAYFGQTP
		SMTEEYRVPDG	SMTEEFRVPDG
		TGQSDYTKAWE	TGQSDFTKAWE
		YYSHYYQQPPG	YYSHYFQQPPG
14	Bcl-2-associated transcriton factor	NP_055554.1	
		DDGVDYWAKRG	DDGVDFWAKRG
		DYRRDYRNNRG	DYRRDFRNNRG
		EEGLKYKSKVS	EEGLKFKSKVS
		EETEDYRQFRK	EETEDFRQFRK
		ERFTSYQKATE	ERFTSFQKATE
		EWDPEYTPKSK	EWDPEFTPKSK
		EWDPEYTPKSK	EWDPEYTPKSK
		GGGGRYHRGGY	GGGGRFHRGGY
		GMRRPYGYRGR	GMRRPFGYRGR
		GRGRGYQGGG	GRGRGFYQGGG
		GRSSFYPDGGD	GRSSFFPDGGD
		HEMKEYSGFAG	HEMKEFSGFAG
		HVKEQYFKSAA	HVKEQFFKSAA
		KDLFDYSPPLH	KDLFDFSPPLH
		KDYKEYKSYKD	KDYKEFKSYKD
		KEYKSYKDDSK	KEYKSFKDDSK
		KTPKDYKEYKS	KTPKDFKEYKS
		LKETGYVVERP	LKETGFVVERP
		MYSRDYRRDYR	MYSRDFRRDYR
		NGSSRYSPSQN	NGSSRFSPSQN
		PGLSAYDNSPR	PGLSAFDNSPR
		PKSKKYFLHDD	PKSKKFFLHDD
		QEALDYFSDKE	QEALDFFSDKE
		REEKNYKLKET	REEKNFKLKET
		RGRGYQGGGG	RGRGYFQGGGG
		RRPYGYRGRGR	RRPYGFRGRGR
		RSRRSYRSSRS	RSRRSFRSSRS

RSSSPYKSPV

SRDRMYSRDYR

SRKKRYSSRSR

SRSRTYSRSRS

WTHDKYQGDGI

YHRGGYRPVWN

RSSSPFSKSPV

SRDRMFSDYR

SRKKRFSSRSR

SRSRTFSDRSRS

WTHDKFQGDGI

FHRGGFRPVWN