

1489-1484-1

Recombinant Proteins

CDK12 Y901C Recombinant Fusion Protein Amino Acid Sequence

1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEM	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFG	240
241	PQQPYKKRPK	ICCPRYGERR	QTESDWGKRC	VDFDIIGII	GEGTYGQVYK	AKDKDTGELV	300
301	ALKKVRDNE	KEGFPITAIR	EIKILRQLIH	RSVVMKEIV	TDKQDALDFK	KDKGAFYLVF	360
361	EYMDHDLMGL	LESGLVHFSE	DHIKSFMKQL	MEGLECHYCK	NFLHRDIKCS	NILLNNSGQI	420
421	KLADFGIARL	YNSEESRPYT	NKVITLWCRP	PELLLGEERY	TPAIDVWSCG	CILGELFTTK	480
481	PIFQANLELA	QLELISRLCG	SPCPAVWPDV	IKLPYFNTMK	PKKQYRRRLR	EEFSFIPSA	540
541	LDLLDHMLTL	DPSKRCTAEQ	TLQSDFLKDV	ELSKMAPDDL	PHWQDCHLW	SKKRRRQRS	600
601	GVVVEEPPPS	KTSRKETTS	TSTEPVKNS				660

1-218: GST Red: HIS6-tag Green: 3C blue: CDK12 fragment boxed: Y901C mutation

CDK12 wt¹ amino acid sequence

1	MPNSERHGGK	KDGSGGASGT	LQPSSGGGSS	NSRERHRLVS	KHKRHKSKHS	KDMGLVTPEA	60
61	ASLGTVIKPL	VEYDDISSDS	DTFSDDMAFK	LDRRENDER	GSDRSRLHK	HRHHQHRRSR	120
121	DLKAKQTEK	EKSQEVSSKS	GSMKDRISGS	SKRSNEETDD	YGKAQVAKSS	SKESRSSLKH	180
181	KEKTRKEREL	KSGHKDRSKS	HRKRETPKYS	KTVDSPKRRS	RSPHRKWSDS	SKQDPSPSGA	240
241	SYGDYDLSP	SRSHTSNND	SYKSPGSTS	RRQSVSPYK	EPSAYQSSTR	SPSPYSRRQR	300
301	SVSPYSRRRS	SSYERSGSYS	GRSPSPYGR	RSSSPFLSKR	SLRSPLPSR	KSMKSRSRSP	360
361	AYSRHSSSHS	KKKRSSSRSR	HSSISPVRPL	LNSSLGAELS	RKKKERAAAA	AAAKMDGKES	420
421	KGSPVFLPRK	ENSSVEAKDS	GLESKKLPRS	VKLEKSAPDT	ELVNVTHLNT	EVKNSSDTGK	480
481	VKLDENSEKH	LVKDLKAQGT	RDSKPIALKE	EIVTPKETET	SEKETPPPLP	TIASPPPLP	540
541	TTTPPPQTPP	LPPLPIPAP	PQQPPLPPSQ	PAFSQVPASS	TSTLPPSTHS	KTSAVSSQAN	600
601	SQPPVQVSVK	TQVSVTAAIP	HLKTSTLPLP	PLPPLPGDD	DMDSPKETLP	SKPVKKEKEQ	660
661	RTRHLLTDL	LPPELPGGDL	SPPDSPEPKA	ITPPQPYK	RPKICCPRYG	ERRQTESDWG	720
721	KRCVDKFDII	GIIGEGTYGQ	VYKAKDKDTG	ELVALKKVRL	DNEKEGFPI	AIREIKILRQ	780
781	LIHRSVVNMK	EIVTDKQDAL	DFKDKGAFY	LVFEYMDHDL	MGLLEGLVH	FSEDHIKFSM	840
841	KQLMEGLEYC	HKKNFLHRDI	KCSNILLNNS	GQIKLADFGL	ARLYNSEESR	PYTNKVITLW	900
901	YRPELLLGE	ERYTPAIDVW	SCGCILGELF	TKKPIFQANL	ELAQLELISR	LCGSPCPAVW	960
961	PDVIKLPYFN	TMKPKKQYRR	RLREEFSFIP	SAALDLLDHM	LTLDPSCRCT	AEQTLQSDFL	1020
1021	KDVELSKMAP	PDLPHWQDCH	ELWSKKRRRQ	RQSGVVVEEP	PPSKTSRKET	TSGTSTEPVK	1080
1081	NSSPAPPQPA	PGKVESGAGD	AIGLADITQQ	LNQSELAVLL	NLLQSQTDL	IPQMAQLLNI	1140
1141	HSNPQMQQQL	EALNQSISAL	TEATSQQQDS	ETMAPEESLK	EAPSAPVILP	SAEQTTLEAS	1200
1201	STPADMQNIL	AVLLSOLMKT	QEPAGSLEEN	NSDKNSGPQG	PRRPTMPQE	EAAACPPHIL	1260
1261	PPEKRPPEPP	GPPPPPPPPP	LVEGDLSSAP	QELNPAVTAA	LLQLLSQPEA	EPPGHLPEH	1320
1321	QALRPMEYST	RPRPNRTYGN	TDGPEETGFA	IDTDERNSGP	ALTESLVQTL	VKNRTFSGSL	1380
1381	SHLGESSSYQ	GTGSVQFPGD	QDLRFARVPL	ALHPVVGQPF	LKAEGSSNSV	VHAETKLQNY	1440
1441	GELGPGTTGA	SSSGAGLHWG	GPTQSSAYGK	LYRGPTRVPP	RGGRGRGVPP		1500

EE : CDK12 sequence expressed in fusionprotein RED: variant in fusion protein

¹NCBI/Protein accession number NP_057591.2

CycK Recombinant Fusion Protein Amino Acid Sequence

1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHHG	RDSLEVL FQG	240
241	PMKENKENS S	PSVTSANLDH	TKPCWYWDKK	DLAHTPSQLE	GLDPATEARY	RREGARFIFD	300
301	VGTRLGLHYD	TLATGIIYFH	RFYMFHSEFKQ	FPRYVTGACC	LFLAGKVEET	PKCKDKI IKT	360
361	ARSLNDVQF	GQFGDDPKEE	VMVLERILLQ	TIKFDLQVEH	PYQFLLKYAK	QLKGDKNKI Q	420
421	KLVQMAWTFV	NDSLCTTSL	QWEPEIIAVA	VMYLAGRLCK	FEIQEWTSKP	MYRRWWEQFV	480
481	QDVPVDVLED	ICHQILDLYS	QGKQMPHHT	PHQLQQPPSL	QPTPQVPVQV	QSQPSQSSEP	540
541	S						600

1-218: GST **Red:** HIS6-tag **Green:** 3C **blue:** CycK fragment

CycK wt² amino acid sequence

1	MKENKENS SP	SVTSANLDHT	KPCWYWDK KD	LAHTPSQLE G	LDPATEARYR	REGARFIFDV	60
61	GTRLGLHYDT	LATGIIYFHR	FYMFHSEFKQ F	PRYVTGACCL	FLAGKVEETP	KKCKDKI IKT A	120
121	RSLNDVQFG	QFGDDPKEEV	MVLERILLQT	IKFDLQVEHP	YQFLLKYAQ	LKGDKNKI QK	180
181	LVQMAWTFVN	DSLCTTSLQ	WEPEIIAVAV	MYLAGRLCKF	EIQEWTSKPM	YRRWWEQFVQ	240
241	DVPVDVLEDI	CHQILDLYSQ	GKQMPHHTP	HQLQQPPSLQ	PTPQVPVQVQ	SQPSQSSEPS	300
301	QPQQKDPQQP	AQQQQPAQQP	KKPSPQPSSP	RQVKRAVVVS	PKEENKAAEP	PPP KIPKIET	360
361	THPPLPPAHP	PPDRKPPLAA	ALGEAEPPGP	VDATDLPKVQ	IPPPAHPAPV	HQPPPLPHRP	420
421	PPPPSSYMT	GMSTTSSYMS	GEGYQSLQSM	MKTEGPSYGA	LPPAYGPPAH	LPYHPHYVPP	480
481	NPPPPVPPP	PASFPPPAIP	PPTPGYPPP	PTYNPNFPPP	PPRLPPTHAV	PPHPPGLGL	540
541	PPASYPPPAV	PPGGQPPVPP	PIPPPGMPPV	GGLGRAAWMR			600

blue: CycK sequence expressed in fusionprotein

²NCBI/Protein accession number NP_001092872.1

Recombinant Proteins