

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of Dac-KEAP1 (1-625 = full length)

<u>Enzyme description:-</u>	Dac-KEAP1
<u>Clone number:-</u>	DU23204
<u>Source:-</u>	Recombinant
<u>Tag:-</u>	N-terminal Dac
<u>Purification method:-</u>	ampicillin- Sepharose
<u>Expression level:-</u>	5 mg/L
<u>Calculated molecular mass:-</u>	
Monoisotopic	100009 Da
Average Mass	100070 Da
[cysteines reduced, methionines have not been oxidised]	
<u>Theoretical pI:-</u>	6.28
<u>Purity:-</u>	90 %
<u>Enzyme storage buffer:-</u>	
50 mM HEPES pH 7.5, 10% glycerol, 150mM NaCl, 1mM DTT	
<u>Storage temperature:-</u>	-80°C
<u>Assay:-</u>	

Division of Signal Transduction Therapy

Clone Data Sheet

Protein name **Dac-KEAP1 1- 625 (full length)**

<u>Protein</u>	Dac-KEAP1 (full length)
<u>Synonyms</u>	iNrf2, KLHL19
<u>Clone Number</u>	DU23204
<u>Species</u>	Human
<u>Accession Number</u>	Protein: Q14145 Gene: NM_203500.1; NM_012289.3
<u>Tags</u>	N-terminal Dac-TEV-TEV-
Aminoacid sequence of the expressed protein	MSAIPGVPOIDAESYILIDYNSGKVLAEQNADVRRDPASLTKMMTSYVIG QAMKAGKFKETDLVTIGNDAWATGNPVFKGSSLMFLKPGMQVPVSQLIRG INLQSGNDACVAMADFAAGSQDAFVGLMNSYVNALGLKNTHFQTVHGLDA DGQYSSARDMALIGQALIRDVPNEYSIYKEKEFTFNGIRQLNRNGLLWDN SLNVDGIKTGHTDKAGYNLVSATEGQMRLISAVMGGRTFKGREAESKKL LTWGFRFFETVNPENLYFOGGSENLYFQMOPDPRPSGAGACCRFLPQSQ CPEGAGDAVMYASTECKAEVTPSQHGNRTFSYTLEDHTKQAFGIMNELRL SQQLCDVTLOVKYQDAPAAQFMAHKVVLASSSPVFKAMFTNGLREQMEV VSIEGIHPKVMERLIEFAYTASISMGEKCVLHVMNGAVMYQIDSVVRACS DFLVQQLDPSNAIGIANFAEQIGCVLHQRAREYIYMHFGEVAKQEEFFN LSHCQLVTLISRDDLNVRCESSEVFHACINWVKYDCEQRRFYVQALLRAVR CHSLTPNFLQMQLQKCEILOSDSRCKDYLVKIFEELTLHKPTQVMPCRAP KVGRLIYTAGGYFRQLSYLEAYNPSDGTWLRRLADLQVPRSGLAGCVVGG LLYAVGGRNNSPDGNTDSSALDCYNPMTNQWSPCAPMSVPRNRIGVGVID GHIYAVGGSHGCIHHNSVERYEPERDEWHLVAPMLTRRIGVGVAVLNRL YAVGGFDGTNRLNSAECYPERNEWRMITAMNTIRSGAGVCVLHNCIYAA GGYDGDQLNSVERYDVETETWTFVAPMKHRRSALGITVHQGRIYVLGGY DGHTFLDSVECYDPDTDTWSEVTRMTSGRSGVGVAVTMEPCRKQIDQQNC TC
Native sequence	in bold
Protease cleavage	two TEV proteases site underlined
Cloning sites	BamH1 / Not1

**DNA sequence of
the expression
cassette**

ATGTCTGCAATCCCGGGTGTACCGCAGATCGATGCGGAGTCTTACATCCTGA
TTGACTATAACTCCGGCAAAGTGCTCGCCGAACAGAACGCAGATGTCCGCCG
CGATCCTGCCAGCCTGACCAAAATGATGACCAGTTACGTTATCGGCCAGGCA
ATGAAAGCCGGTAAATTTAAAGAAACTGATTTAGTCACTATCGGCAACGACG
CATGGGCCACCGGTAAACCCGGTGTTTAAAGGTTCTTCGCTGATGTTCCCTCAA
ACCGGGCATGCAGGTTCCGGTTTCTCAGCTGATCCGCGGTATTAACCTGCAA
TCGGGTAACGATGCTTGTGTCGCCATGGCCGATTTTGCCGCTGGTAGCCAGG
ACGCTTTTGTGGCTTGATGAACAGCTACGTTAACGCCTGGGCCTGAAAAA
TACCCACTTCCAGACGGTACATGGTCTGGATGCTGATGGTCAGTACAGCTCC
GCGCGAGATATGGCGCTGATCGGCCAGGCATTGATCCGTGACGTACCGAATG
AATACTCGATCTATAAAGAAAAAGAATTTACGTTAACGGTATTCGCCAGCT
GAACCGTAACGGCCTGTTATGGGATAACAGCCTGAATGTCGACGGCATCAAA
ACCGGACACACTGACAAAGCAGGTTACAACCTTGTGCTTCTGCGACTGAAG
GCCAGATGCGCTTGATTTCTGCGGTAATGGGCGGACGTACTTTTAAAGGCCG
TGAAGCCGAAAGTAAAAAACTGCTAACCTGGGGCTTCCGTTTCTTTGAAACC
GTTAACCCAGAAAACCTGTATTTTCAGGGCggatccGAAAACCTGTATTTTC
AGatgcagccagatcccaggcctagcggggctggggcctgctgccgattcct
gcccctgcagtcacagtgccctgagggggcaggggacgcgggtgatgtacgcc
tccactgagtgaaggcggagggtgacgccctcccagcatggcaaccgcacct
tcagctacaccctggaggatcataccaagcaggcctttggcatcatgaacga
gctgcggctcagccagcagctgtgtgacgtcacactgcagggtcaagtaccag
gatgcaccggcgcgccagttcatggcccacaagggtggtgctggcctcatcca
gccctgtcttcaaggccatgttccaccaacgggctgcgggagcagggcatgga
gggtggtgtccattgagggatccaccccaagggtcatggagcgcctcattgaa
ttcgctacacggcctccatctccatgggcgagaagtgtgtcctccacgtca
tgaacggtgctgtcatgtaccagatcgacagcgttgtccgtgctgcagtga
cttccctggtgcagcagctggaccccagcaatgccatcggcacgccaacttc
gctgagcagattggctgtgtggagttgaccagcgtgcccgaggatcacatct
acatgcattttggggaggtggccaagcaagaggagttcttcaacctgtccca
ctgccaactggtgacctcatcagccgggacgacctgaacgtgcgctgcgag
tccgaggtcttccacgcctgcatcaactgggtcaagtacgactgcgaacagc
gacgggtctacgtccaggcgtgctgcgggccgtgcgctgccactcgttgac
gccgaacttctgcagatgcagctgcagaagtgcgagatcctgcagtcggac
tcccgtgcaaggactacctggtcaagatcttcgaggagctcaccctgcaca
agcccacgcagggtgatgccctgccggcgcccaagggtggggcgcctgatcta
caccgctggcggtacttccgacagtcgctcagctacctggaggcttacaac
cccagtgacggcacctggctccggttggcgacactgcaggtgccgcggagcg
gcctggccggctgcgtggtggggcggctggtgtacgccgtgggcggcaggaa
caactcgcggacggcaacaccgactccagcgcctggactgtacaacccc
atgaccaatcagtggtcgcctgcgccccatgagcgtgccccgtaaccgca
tcgggggtgggggtcatcgatggccacatctatgccgtcggcggctcccacgg
ctgcatccaccacaacagtgtggagaggtatgagccagagcgggatgagtg
cacttgggtggccccaatgctgacacgaaggatcgggggtggcgtggctgtcc
tcaatcgtctcctttatgccgtgggggctttgacgggacaaaccgccttaa
ttcagctgagtggtactaccagagaggaacgagtggcgaatgatcacagca
atgaacaccatccgaagcggggcaggcgtctgctcctgcacaactgtatct
atgctgtgggggctatgatggtcaggaccagctgaacagcgtggagcgcta
cgatgtggaacagagacgtggactttcgtagccccatgaagcaccggcga
agtgccctggggatcactgtccaccaggggagaatctacgtccttggaggct
atgatggtcacacgttccctggacagtggtggagtggttacgaccagatacaga
cacctggagcaggtgacctgaatgacatcgggcccggagtggggtgggcgtg
gctgtcaccatggagccctgccggaagcagattgaccagcagaactgtacct
gttgaGCGGCCGC