*h*HDAC1 VersaClone cDNA

Catalog Number: RDC2788

Specifications:

Gene:	*h*HDAC1
Accession:	NP_004955
Insert size:	1462bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

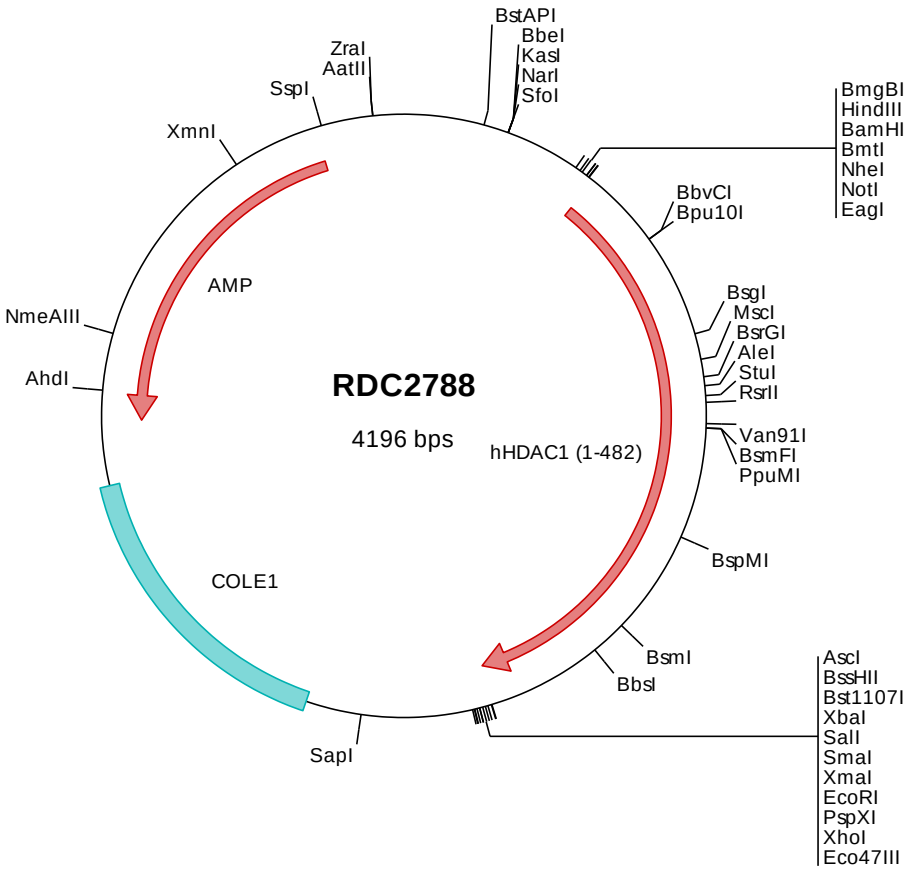
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*HDAC1 cDNA Plasmid

HDAC1 histone deacetylase 1
[*Homo sapiens* (human)]

Also known as: HD1; RPD3; KDAC1; GON-10; RPD3L1

Summary:
HDAC1 belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. HDAC1 also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
a bio-techne brand

> RDC2788 Plasmid DNA Sequence

```
   1  tcgcgcgttt cggtgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atggcgcaga cgcagggcac tcggaggaaa gtctgttact actacgacgg
 501  ggatgttgga aattactatt atggacaagg ccacccaatg aagcctcacc gaatccgcat gactcataat ttgctgctca actatggtct ctaccgaaaa
 601  atggaaatct atcgccctca caaagccaat gctgaggaga tgaccaagta ccacagcgat gactacatta aattcttgcg ctccatccgt ccagataaca
 701  tgtcggagta cagcaagcag atgcagagat tcaacgttgg tgaggactgt ccagtattcg atggcctgtt tgagttctgt cagttgtcta ctggtggttc
 801  tgtggcaagt gctgtgaaac ttaataagca gcagacggac atcgctgtga attgggctgg gggcctgcac catgcaaaga agtccgaggc atctggcttc
 901  tgttacgtca atgatatcgt cttggccatc ctggaactgc taaagtatca ccagagggtg ctgtacattg acattgatat tcaccatggt gacggcgtgg
1001  aagaggcctt ctacaccacg gaccgggtca tgactgtgtc ctttcataag tatggagagt acttcccagg aactggggac ctacgggata tcggggctgg
1101  caaaggcaag tattatgctg ttaactaccc gctccgagac gggattgatg acgagtccta tgaggccatt ttcaagccgg tcatgtccaa agtaatggag
1201  atgttccagc ctagtgcggt ggtcttacag tgtggctcag actccctatc tggggatcgg ttaggttgct tcaatctaac tatcaaagga cacgccaagt
1301  gtgtggaatt tgtcaagagc tttaacctgc ctatgctgat gctgggaggc ggtggttaca ccattcgtaa cgttgcccgg tgctggacat atgagacagc
1401  tgtggccctg gatacggaga tccctaatga gcttccatac aatgactact ttgaatactt tggaccagat ttcaagctcc acatcagtcc ttccaatatg
1501  actaaccaga acacgaatga gtacctggag aagatcaaac agcgactgtt tgagaacctt agaatgctgc cgcacgcacc tggggtccaa atgcaggcga
1601  ttcctgagga cgccatccct gaggagagtg gcgatgagga cgaagacgac cctgacaagc gcatctcgat ctgctcctct gacaaacgaa ttgcctgtga
1701  ggaagagttc tccgattctg aagaggaggg agaggggggc cgcaagaact cttccaactt caaaaaagcc aagagagtca aaacagagga tgaaaaagag
1801  aaagacccag aggagaagaa agaagtcacc gaagaggaga aaaccaagga ggagaagcca gaagccaaag gggtcaagga ggaggtcaag ttggcctaaa
1901  ggcgcgccag tatactctag agtcgacacc cggggaattc ctcgagcgct cgtctctagc ttggcgtaat catggtcata gctgtttcct gtgtgaaatt
2001  gttatccgct cacaattcca cacaacatac gagccggaag cataaagtgt aaagcctggg gtgcctaatg agtgagctaa ctcacattaa ttgcgttgcg
2101  ctcactgccc gctttccagt cgggaaacct gtcgtgccag ctgcattaat gaatcggcca acgcgcgggg agaggcggtt tgcgtattgg gcgctcttcc
2201  gcttcctcgc tcactgactc gctgcgctcg gtcgttcggc tgcggcgagc ggtatcagct cactcaaagg cggtaatacg gttatccaca gaatcagggg
2301  ataacgcagg aaagaacatg tgagcaaaag gccagcaaaa ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc cataggctcc gccccctga
2401  cgagcatcac aaaaatcgac gctcaagtca gaggtggcga aacccgacag gactataaag ataccaggcg tttcccctg gaagctccct cgtgcgctct
2501  cctgttccga ccctgccgct taccggatac ctgtccgcct ttctcccttc gggaagcgtg gcgctttctc aatgctcacg ctgtaggtat ctcagttcgg
2601  tgtaggtcgt tcgctccaag ctgggctgtg tgcacgaacc ccccgttcag cccgaccgct gcgccttatc cggtaactat cgtcttgagt ccaacccggt
2701  aagacacgac ttatcgccac tggcagcagc cactggtaac aggattagca gagcgaggta tgtaggcggt gctacagagt tcttgaagtg gtggcctaac
2801  tacggctaca ctagaaggac agtatttggt atctgcgctc tgctgaagcc agttaccttc ggaaaaagag ttggtagctc ttgatccggc aaacaaacca
2901  ccgctggtag cggtggtttt tttgtttgca agcagcagat tacgcgcaga aaaaaaggat ctcaagaaga tcctttgatc ttttctacgg ggtctgacgc
3001  tcagtggaac gaaaactcac gttaagggat tttggtcatg agattatcaa aaaggatctt cacctagatc cttttaaatt aaaaatgaag ttttaaatca
3101  atctaaagta tatatgagta aacttggtct gacagttacc aatgcttaat cagtgaggca cctatctcag cgatctgtct atttcgttca tccatagttg
3201  cctgactccc cgtcgtgtag ataactacga tacgggaggg cttaccatct ggccccagtg ctgcaatgat accgcgagac ccacgctcac cggctccaga
3301  tttatcagca ataaaccagc cagccggaag ggccgagcgc agaagtggtc ctgcaacttt atccgcctcc atccagtcta ttaattgttg ccgggaagct
3401  agagtaagta gttcgccagt taatagtttg cgcaacgttg ttgccattgc tacaggcatc gtggtgtcac gctcgtcgtt tggtatggct tcattcagct
3501  ccggttccca acgatcaagg cgagttacat gatcccccat gttgtgcaaa aaagcggtta gctccttcgg tcctccgatc gttgtcagaa gtaagttggc
3601  cgcagtgtta tcactcatgg ttatggcagc actgcataat tctcttactg tcatgccatc cgtaagatgc ttttctgtga ctggtgagta ctcaaccaag
3701  tcattctgag aatagtgtat gcggcgaccg agttgctctt gcccggcgtc aatacgggat aataccgcgc cacatagcag aactttaaaa gtgctcatca
3801  ttggaaaacg ttcttcgggg cgaaaactct caaggatctt accgctgttg agatccagtt cgatgtaacc cactcgtgca cccaactgat cttcagcatc
3901  ttttactttc accagcgttt ctgggtgagc aaaaacagga aggcaaaatg ccgcaaaaaa gggaataagg gcgacacgga aatgttgaat actcatactc
4001  ttcctttttc aatattattg aagcatttat cagggttatt gtctcatgag cggatacata tttgaatgta tttagaaaaa taaacaaata ggggttccgc
4101  gcacatttcc ccgaaaagtg ccacctgacg tctaagaaac cattattatc atgacattaa cctataaaaa taggcgtatc acgaggccct ttcgtc
```

> RDC2788 Translated Insert Sequence

```
  1  maqtqgtrrk vcyyydgdvg nyyygqghpm kphrirmthn lllnyglyrk meiyrphkan aeemtkyhsd dyikflrsir pdnmseyskq mqrfnvgedc
101  pvfdglfefc qlstggsvas avklnkqqtd iavnwagglh hakkseasgf cyvndivlai lellkyhqrv lyididihhg dgveeafytt drvmtvsfhk
201  ygeyfpgtgd lrdigagkgk yyavnyplrd giddesyeai fkpvmskvme mfqpsavvlq cgsdslsgdr lgcfnltikg hakcvefvks fnlpmlmlgg
301  ggytirnvar cwtyetaval dteipnelpy ndyfeyfgpd fklhispsnm tnqntneyle kikqrlfenl rmlphapgvq mqaipedaip eesgdededd
401  pdkrisicss dkriaceeef sdseeegegg rknssnfkka krvktedeke kdpeekkevt eeektkeekp eakgvkeevk la
```