*h*TGF-β2 VersaClone cDNA

Catalog Number: RDC3633

Specifications:

Gene:	*h*TGFB2
Accession:	NP_003229.1
Insert size:	1258bp
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

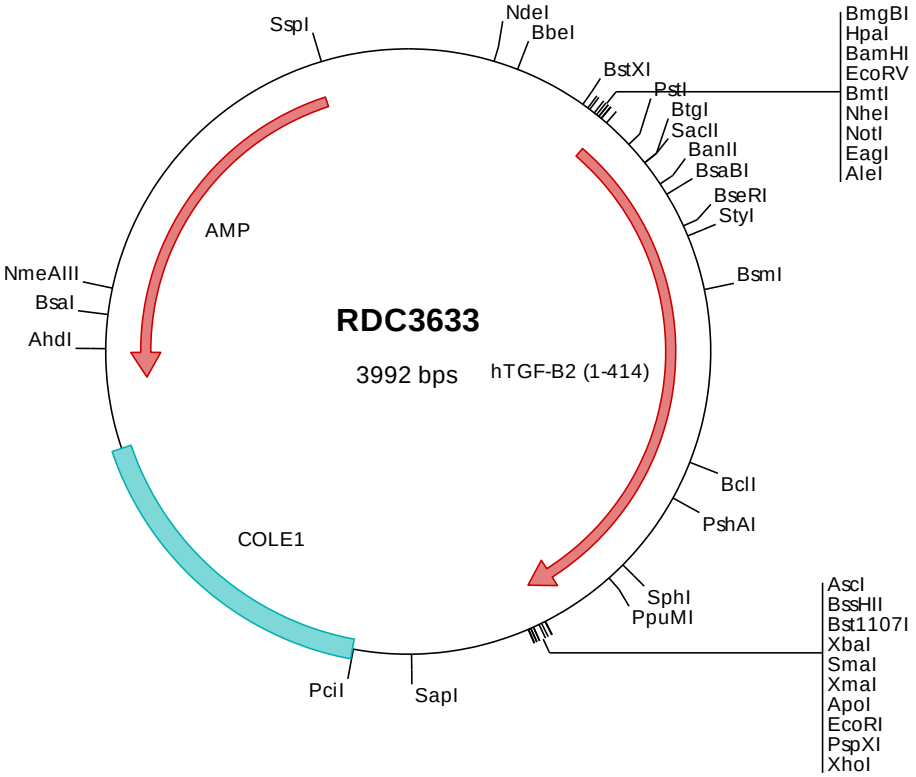
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*TGF-β2 cDNA Plasmid

TGFB2 transforming growth factor beta 2 [*Homo sapiens* (human)]

Also known as: LDS4; G-TSF; TGF-beta2

Summary:
TGF-beta 2 a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. TGF-beta 2 is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGF-beta family members. Disruption of the TGF-beta/SMAD pathway has been implicated in a variety of human cancers.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

bio-techne®

R&D SYSTEMS

> RDC3633 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 atgcactact gtgtgctgag cgcttttctg atcctgcatc tggtcacggt
 501  cgcgctcagc ctgtctacct gcagcacact cgatatggac cagttcatgc gcaagaggat cgaggcgatc cgcgggcaga tcctgagcaa gctgaagctc
 601  accagtcccc cagaagacta tcctgagccc gaggaagtcc ccccggaggt gatttccatc tacaacagca ccagggactt gctccaggag aaggcgagtc
 701  gacgggcagc agcctgcgag cgcgagagga gcgacgaaga gtactacgcc aaggaggttt acaaaataga catgccgccc ttcttcccct ccgaaaatgc
 801  catcccgccc actttctaca gaccctactt cagaattgtt cgatttgacg tctcagcaat ggagaagaat gcttccaatt tggtgaaagc agagttcaga
 901  gtctttcgtt tgcagaaccc aaaagccaga gtgcctgaac aacggattga gctatatcag attctcaagt ccaaagattt aacatctcca acccagcgct
1001  acatcgacag caaagttgtg aaaacaagag cagaaggcga atggctctcc ttcgatgtaa ctgatgctgt tcatgaatgg cttcaccata aagacaggaa
1101  cctgggattt aaaataagct tacactgtcc ctgctgcact tttgtaccat ctaataatta catcatccca aataaaagtg aagaactaga agcaagattt
1201  gcaggtattg atggcacctc cacatatacc agtggtgatc agaaaactat aaagtccact aggaaaaaaa acagtgggaa gaccccacat ctcctgctaa
1301  tgttattgcc ctcctacaga cttgagtcac aacagaccaa ccggcggaag aagcgtgctt tggatgcggc ctattgcttt agaaatgtgc aggataattg
1401  ctgcctacgt ccacctttaca ttgatttcaa gagggatcta gggtggaaat ggatacacga acccaaaggg tacaatgcca acttctgtgc tggagcatgc
1501  ccgtatttat ggagttcaga cactcagcac agcagggtcc tgagcttata taataccata aatccagaag catctgcttc tccttgctgc gtgtcccaag
1601  atttagaacc tctaaccatt ctctactaca ttggcaaaac acccaagatt gaacagcttt ctaatatgat tgtaaagtct tgcaaatgca gctaaaggcg
1701  cgccagtata ctctagagtc gacacccggg gaattcctcg agcgctcgtc tctagcttgg cgtaatcatg gtcatagctg tttcctgtgt gaaattgtta
1801  tccgctcaca attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg agctaactca cattaattgc gttgcgctca
1901  ctgcccgctt tccagtcggg aaacctgtcg tgccagctgc attaatgaat cggccaacgc gcggggagag gcggtttgcg tattgggcgc tcttccgctt
2001  cctcgctcac tgactcgctg cgctcggtcg ttcggctgcg gcgagcggta tcagctcact caaaggcggt aatacggtta tccacagaat caggggataa
2101  cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg tttttccata ggctccgccc ccctgacgag
2201  catcacaaaa atcgacgctc aagtcagagg tggcgaaacc cgacaggact ataaagatac caggcgtttc cccctggaag ctccctcgtg cgctctcctg
2301  ttccgaccct gccgcttacc ggatacctgt ccgcctttct cccttcggga agcgtggcgc tttctcaatg ctcacgctgt aggtatctca gttcggtgta
2401  ggtcgttcgc tccaagctgg gctgtgtgca cgaaccccc gttcagcccg accgctgcgc cttatccggt aactatcgtc ttgagtccaa cccggtaaga
2501  cacgacttat cgccactggc agcagccact ggtaacagga ttagcagagc gaggtatgta ggcggtgcta cagagttctt gaagtggtgg cctaactacg
2601  gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt accttcggaa aaagagttgg tagctcttga tccggcaaac aaaccaccgc
2701  tggtagcggt ggttttttg tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct ttgatctttt ctacggggtc tgacgctcag
2801  tggaacgaaa actcacgtta agggattttg gtcatgagat tatcaaaaag gatcttcacc tagatccttt taaattaaaa atgaagtttt aaatcaatct
2901  aaagtatata tgagtaaact tggtctgaca gttaccaatg cttaatcagt gaggcaccta tctcagcgat ctgtctattt cgttcatcca tagttgcctg
3001  actccccgtc gtgtagataa ctacgatacg ggagggctta ccatctggcc ccagtgctgc aatgataccg cgagacccac gctcaccggc tccagattta
3101  tcagcaataa accagccagc cggaagggcc gagcgcagaa gtggtcctgc aactttatcc gcctccatcc agtctattaa ttgttgccgg gaagctagag
3201  taagtagttc gccagttaat agtttgcgca acgttgttgc cattgctaca ggcatcgtgg tgtcacgctc gtcgtttggt atggcttcat tcagctccgg
3301  ttcccaacga tcaaggcgag ttacatgatc ccccatgttg tgcaaaaaag cggttagctc cttcggtcct ccgatcgttg tcagaagtaa gttggccgca
3401  gtgttatcac tcatggttat ggcagcactg cataattctc ttactgtcat gccatccgta agatgctttt ctgtgactgg tgagtactca accaagtcat
3501  tctgagaata gtgtatgcgg cgaccgagtt gctcttgccc ggcgtcaata cgggataata ccgcgccaca tagcagaact ttaaaagtgc tcatcattgg
3601  aaaacgttct tcggggcgaa aactctcaag gatcttaccg ctgttgagat ccagttcgat gtaacccact cgtgcaccca actgatcttc agcatctttt
3701  actttcacca gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc aaaaaaggga ataagggcga cacggaaatg ttgaatactc atactcttcc
3801  tttttcaata ttattgaagc atttatcagg gttattgtct catgagcgga tacatatttg aatgtattta gaaaaataaa caaatagggg ttccgcgcac
3901  atttccccga aaagtgccac ctgacgtcta agaaaccatt attatcatga cattaaccta taaaaatagg cgtatcacga ggccctttcg tc
```

> RDC3633 Translated Insert Sequence

```
   1  mhycvlsafl ilhlvtvals lstcstldmd qfmrkrieai rgqilsklkl tsppedypep eevppevisi ynstrdllqe kasrraaace rersdeeyya
 101  kevykidmpp ffpsenaipp tfyrpyfriv rfdvsamekn asnlvkaefr vfrlqnpkar vpeqrielyq ilkskdltsp tqryidskvv ktraegewls
 201  fdvtdavhew lhhkdrnlgf kislhcpcct fvpsnnyiip nkseelearf agidgtstyt sgdqktikst rkknsgktph lllmllpsyr lesqqtnrrk
 301  kraldaaycf rnvqdncclr plyidfkrdl gwkwihepkg ynanfcagac pylwssdtqh srvlslynti npeasaspcc vsqdleplti lyyigktpki
 401  eqlsnmivks ckcs
```