

## Appendix

### A. DNA sequences of the UZ3/4 TCR chains

#### TCR alpha 7 chain

LOCUS TCR alpha 822 bp DNA  
 ACCESSION TCR alpha 7  
 KEYWORDS L + recombined V alpha 7.2 J alpha 18 + C alpha  
 SOURCE CD8+ T cell clone UZ3/4.  
 ORGANISM mus musculus

REFERENCE 1 (bases 1 to 822)  
 AUTHORS Self  
 JOURNAL Unpublished.

FEATURES Location/Qualifiers  
 BASE COUNT 226 a 211 c 181 g 204 t  
 ORIGIN

```

1 ATGCCTCCTC ACAGCCTGCT CTGTGTGCTG GTGGCCTTGG CTTTCTCTGG ATCTAATGTG
61 GCCCAGAAAG TGATTCAGGT CTGGTCAACA ACAAGCAGGC AGGAGGGCGA AAAACTCACA
121 CTGGACTGTT CATATAAGAC AAGTCAGGTC TTATACCATC TTTTCTGGTA CAAGCACCTT
181 CTTAGTGGAG AGATGGTTTT GCTTATTCGA CAAATGCCTT CTAATATTGC AATAGAGAGG
241 AGCGGCCGCT ATTCTGTAGT CTTCCAGAAA TCACGCAAAT CCATCAGCCT TGTCAATTCA
301 ACCTTACAAC CAGACGATTC GGGAAAGTAT TTCTGTGCTC TCTGGGAGCT GGACTATAAC
361 CAGGGGAAGC TTATCTTTGG ACAGGGAACC AAGTTATCTA TCAAGCCCAA CATCCAGAAC
421 CCAGAACCTG CTGTGTACCA GTTAAAAGAT CCTCGGTCTC AGGACAGCAC CCTCTGCCTG
481 TTCACCGACT TTGACTCCCA AATCAATGTG CCGAAAACCA TGGAACTCTGG AACGTTTCATC
541 ACTGACAAAA CTGTGCTGGA CATGAAAGCT ATGGATTCCA AGAGCAATGG GGCCATTGCC
601 TGGAGCAACC AGACAAGCTT CACCTGCCAA GATATCTTCA AAGAGACCAA CGCCACCTAC
661 CCCAGTTCAG ACGTTCCTTG TGATGCCACG TTGACTGAGA AAAGCTTTGA AACAGATATG
721 AACCTAAACT TTCAAAACCT GTCAGTTATG GGACTCCGAA TCCTCCTGCT GAAAGTAGCC
781 GGATTTAACC TGCTCATGAC GCTGAGGCTG TGGTCCAGTT GA

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#### TRANSLATION

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MPPHSLLCVLVALAFSGSNVAQKVIQVWSTTSRQEGEKLTLDCSYKTSQVLYHL
FWYKHLLSGEMVLLIRQMPSTIAIERSGRYSVVFQKSRKSI SLVISTLQPDDSG
KYFCALWELDYNQGKLI FGQGTKLSIKPNIQNPEPAVYQLK

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MPPHSLLCVLVALAFSGSNVAQKVIQVWSTTSRQEGEKLTLDCSYKTSQV
LYHLFWYKHLLSGEMVLLIRQMPSTIAIERSGRYSVVFQKSRKSI SLVIS
TLQPDDSGKYFCALWELDYNQGKLI FGQGTKLSIKPNIQNPEPAVYQLKD
PRSQDSTLCLFTDFDSQINVPKTMESGTFITDKTVLDMKAMDSKSNGAIA
WSNQTSFTCQDIFKETNATYPSSDVPCDATL TEKSFETDMNLFQNL SVM
GLRILLKLVAGFNLLMTRLRLWSS*

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**TCR alpha 8 chain**

LOCUS TCR alpha 831 bp DNA  
 ACCESSION TCR alpha 8  
 KEYWORDS L + recombined V alpha 8.2 J alpha 42 + C alpha  
 SOURCE CD8+ T cell clone UZ3/4.  
 ORGANISM mus musculus

REFERENCE 1 (bases 1 to 831)

AUTHORS Self

JOURNAL Unpublished.

FEATURES Location/Qualifiers

BASE COUNT 213 a 236 c 189 g 193 t

ORIGIN

```

1 ATGCGTCCTG GCACCTGCTC AGTTCTTGTG CTCCTCCTAA TGCTCAGGAG GAGCAATGGA
61 GATGGAGACT CAGTGACCCA GAAGGAAGGC CTGGTCACTC TCACCGAGGG GTTGCTGTG
121 ATGCTGAACT GCACCTATCA GACTATTTAC TCAAATGCTT TCCTTTTCTG GTATGTGCAC
181 TATCTCAATG AATCCCCTCG GCTACTCCTG AAGAGCTCCA CAGACAACAA GAGGACCGAG
241 CACCAAGGGT TCCACGCCAC TCTCCATAAG AGCAGCAGCT CCTTCCATCT GCAGAAGTCC
301 TCAGCGCAGC TGTCAGACTC TGCCCTGTAC TACTGTGCTC TGAGTGATCG AGGGAGGGCA
361 TCCTCCTCCT TCAGCAAGCT GGTGTTTGGG CAGGGGACAT CTTATCAGT CGTTCCAAAC
421 ATCCAGAACC CAGAACCTGC TGTGTACCAG TTTAAAGATC CTCGGTCTCA GGACAGCACC
481 CTCTGCCTGT TCACCGACTT TGACTCCCAA ATCAATGTGC CGAAAACCAT GGAATCTGGA
541 ACGTTCATCA CTGACAAAAC TGTGCTGGAC ATGAAAGCTA TGGATTCCAA GAGCAATGGG
601 GCCATTGCCT GGAGCAACCA GACAAGCTTC ACCTGCCAAG ATATCTTCAA AGAGACCAAC
661 GCCACCTACC CCAGTTCAGA CGTTCCTGTG GATGCCACGT TGACTGAGAA AAGCTTTGAA
721 ACAGATATGA ACCTAAACTT TCAAAACCTG TCAGTTATGG GACTCCGAAT CCTCCTGCTG
781 AAAGTAGCCG GATTTAACCT GCTCATGACG CTGAGGCTGT GGTCCAGTTG A

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TRANSLATION

```

MRPGTCSVLVLLMLRRSNGDGDSVTQKEGLVTLTEGLPVMLNCTYQTIY
SNAFLFWYVHYLNESPRLLLKSSTDNKRTEHQGFHATLHKSSSFHLQKS
SAQLSDSALYYCALSDRGRASSFSKLVFGQGTSLSVVNIQNPEPAVYQ
LKDPRSQDSTLCLFTDFDSQINVPKTMESGTFITDKTVLDMKAMDSKSN
AIAWSNQTSFTCQDIFKETNATYPSSDVPCDATALTEKSFETDMNLFQNL
SVMGLRILLKLVAGFNLLMTLRLWSS*

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**TCR beta 8 chain**

LOCUS TCR beta 906 bp  
 ACCESSION TCR beta 8  
 KEYWORDS L + recombined V beta 8.1 D beta 1 J beta 1.1 + C beta  
 SOURCE CD8+ T cell clone UZ3/4.  
 ORGANISM mus musculus

REFERENCE 1 (bases 1 to 906)  
 AUTHORS Self  
 JOURNAL Unpublished.

FEATURES Location/Qualifiers  
 BASE COUNT 234 a 226 c 245 g 201 t  
 ORIGIN

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1 ATGGGCTCCA GACTCTTCTT TGTGGTTTTG ATTCTCCTGT GTGCAAAACA CATGGAGGCT
61 GCAGTCACCC AAAGTCCAAG AAGCAAGGTG GCAGTAACAG GAGGAAAGGT GACATTGAGC
121 TGTCACCAGA CTAATAACCA TGACTATATG TACTGGTATC GGCAGGACAC GGGGCATGGG
181 CTGAGGCTGA TCCATTACTC ATATGTCGCT GACAGCACGG AGAAAGGAGA TATCCCTGAT
241 GGGTACAAGG CCTCCAGACC AAGCCAAGAG AATTTCTCTC TCATTCTGGA GTTGGCTTCC
301 CTTTCTCAGA CAGCTGTATA TTTCTGTGCC AGCAGTGTAG ACAGAACAGA AGTCTTCTTT
361 GGTAAAGGAA CCAGACTCAC AGTTGTAGAG GATCTGAGAA ATGTGACTCC ACCCAAGGTC
421 TCCTTGTTTG AGCCATCAAA AGCAGAGATT GCAAACAAAC AAAAGGCTAC CCTCGTGTGC
481 TTGGCCAGGG GCTTCTTCCC TGACCACGTG GAGCTGAGCT GGTGGGTGAA TGGCAAGGAG
541 GTCCACAGTG GGGTCAGCAC GGACCCTCAG GCCTACAAGG AGAGCAATTA TAGCTACTGC
601 CTGAGCAGCC GCCTGAGGGT CTCTGCTACC TTCTGGCACA ATCCTCGAAA CCACTTCCGC
661 TGCCAAGTGC AGTTCCATGG GCTTTCAGAG GAGGACAAGT GGCCAGAGGG CTCACCCAAA
721 CCTGTACAC AGAACATCAG TGCAGAGGCC TGGGGCCGAG CAGACTGTGG GATCACTTCA
781 GCATCCTATC AGCAGGGGGT TCTGTCTGCA ACCATCCTCT ATGAGATCCT AGGGAAGGCC
841 ACCCTATATG CTGTGCTGGT CAGTGGCCTG GTGCTGATGG CCATGGTCAA GAAAAAAAAAT
901 TCCTGA

```

## TRANSLATION

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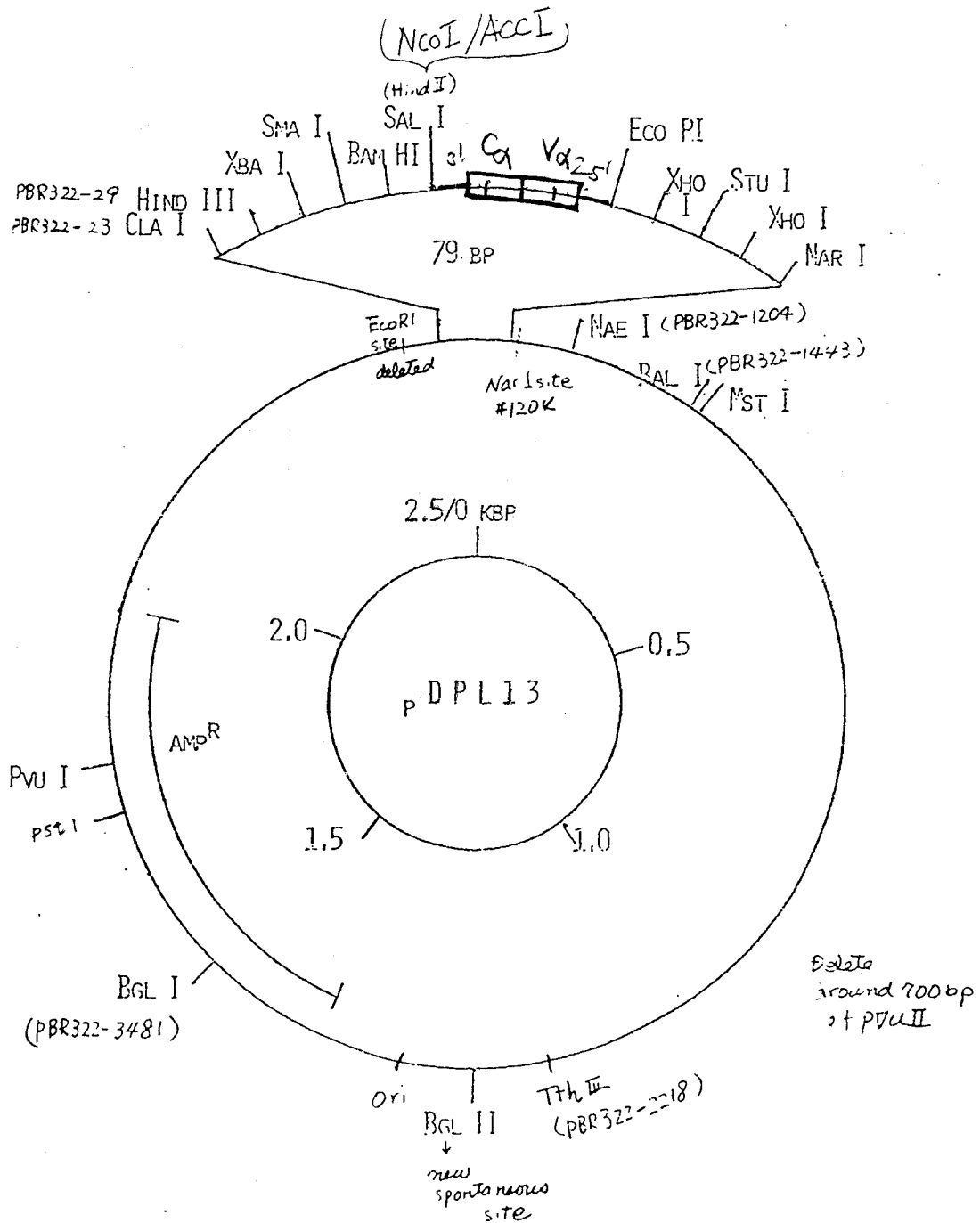
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S*

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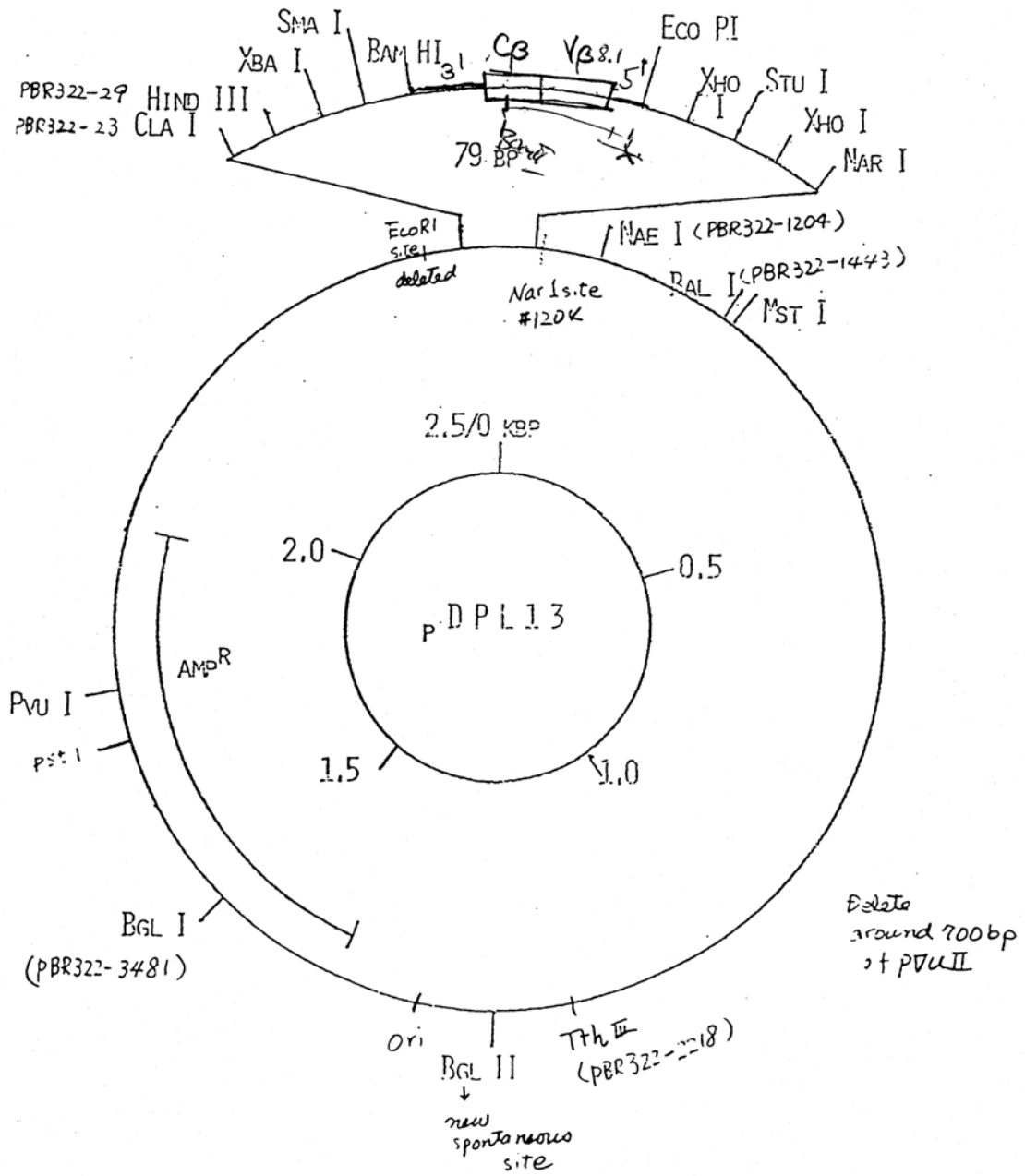
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### B. Plasmid charts

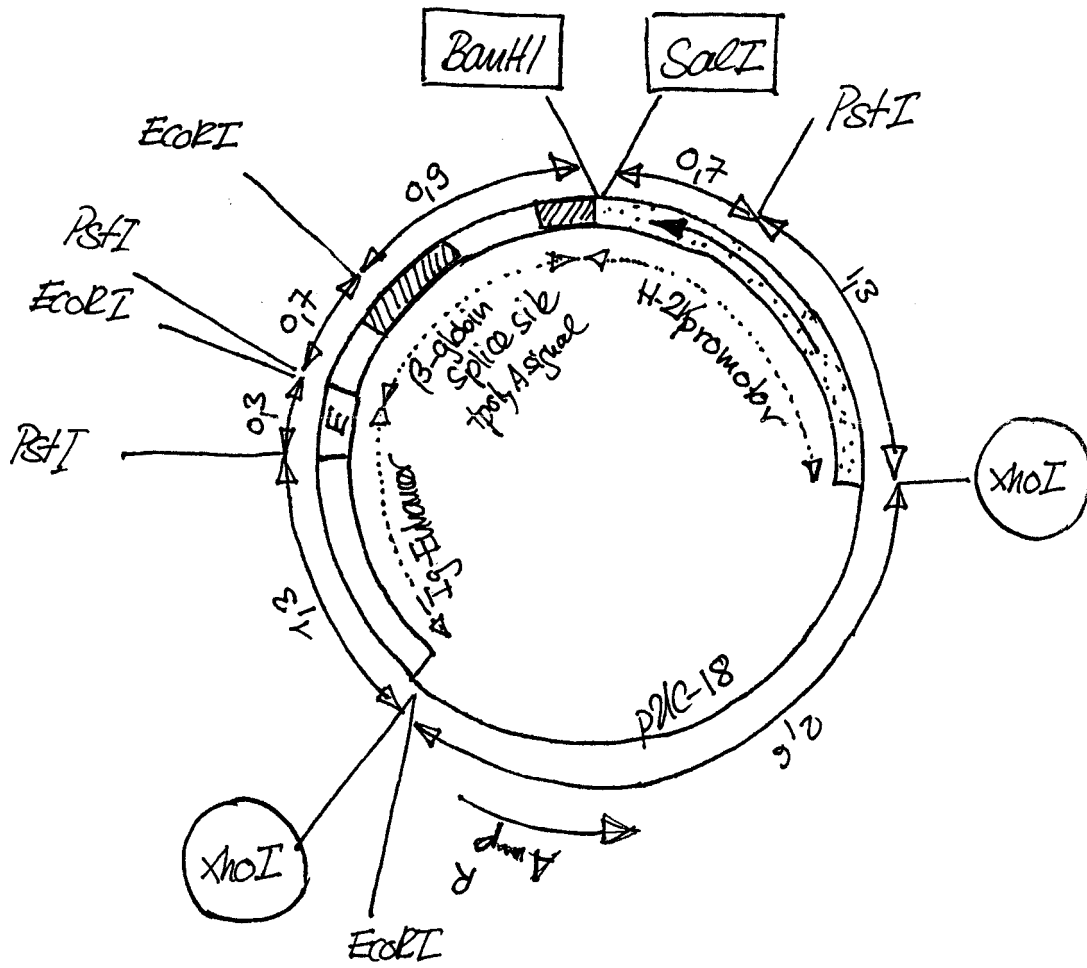
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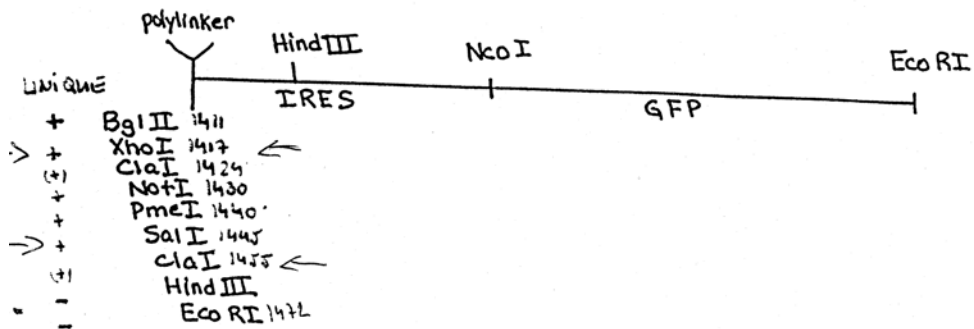
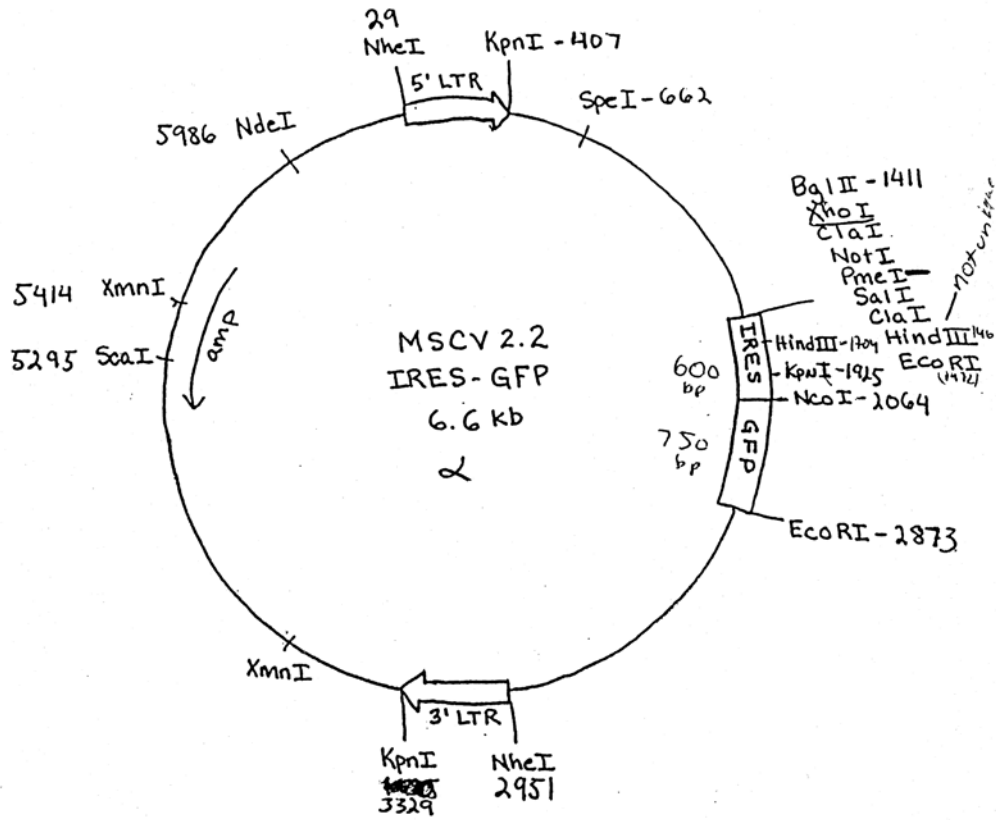
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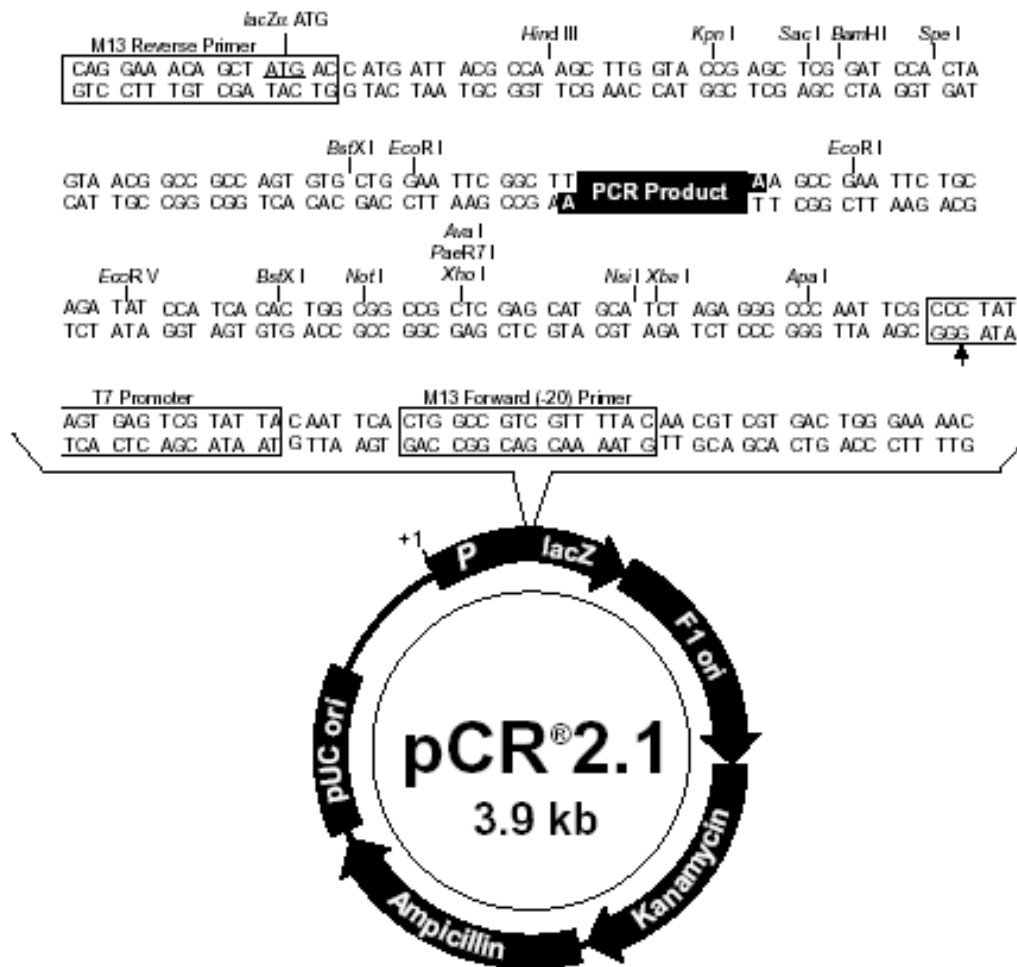
pHSE3'



**pMSCV2.2-IRES-GFP**



## pCR2.1

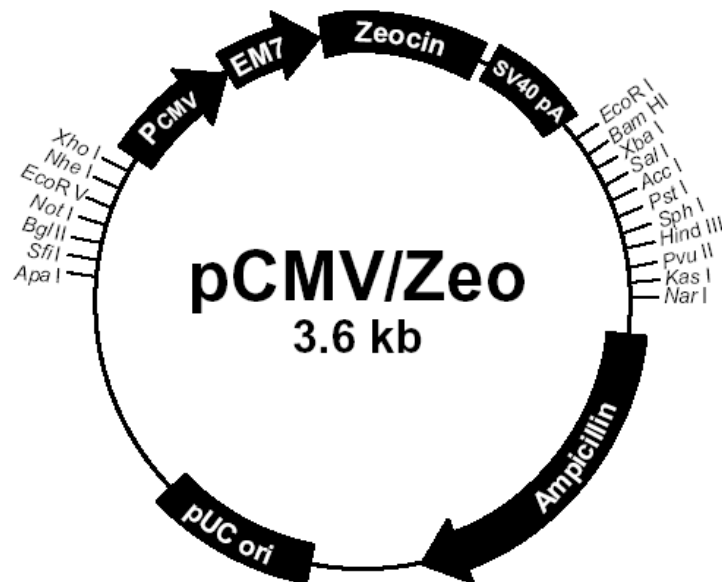


Comments for pCR<sup>®</sup>2.1  
3929 nucleotides

*LacZ*α gene: bases 1-545  
M13 Reverse priming site: bases 205-221  
Multiple Cloning Site: bases 234-355  
T7 promoter: bases 362-381  
M13 (-20) Forward priming site: bases 389-404  
f1 origin: bases 546-983  
Kanamycin resistance ORF: bases 1317-2111  
Ampicillin resistance ORF: bases 2129-2989  
pUC origin: bases 3134-3807



## pCMV/Zeo



**Comments for pCMV/Zeo**  
3595 nucleotides

*bla* promoter (-10 region): bases 160-166  
 Ribosome binding site: bases 189-193  
 Beta-lactamase ORF: bases 201-1061  
 pUC origin: bases 1206-1879  
 5' Polylinker: bases 1887-1937  
 CMV promoter: bases 1941-2449  
 EM7 promoter: bases 2565-2631  
*Sh ble* ORF: bases 2632-3006  
 SV40 polyadenylation sequence: bases 3020-3101  
 3' Polylinker: bases 3150-3359

## C. Suppliers

<b>Supplier</b>	<b>Location</b>	<b>URL</b>
Amersham Biosciences Europe GmbH	Munzinger Str. 9 D-79111 Freiburg;	<a href="http://www.amershambiosciences.com">www.amershambiosciences.com</a>
Amersham Biosciences Inc.	800 Centennial Ave. Piscataway , NJ 08855-1327	
Avidity LLC	1899 Gaylord St. Denver , CO 80206	<a href="http://www.avidity.com">www.avidity.com</a>
BD Biosciences – PharMingen	Tullastr. 8-12 D-69126 Heidelberg;	<a href="http://www.bdbiosciences.com">www.bdbiosciences.com</a>
Clontech	10975 Torreyana Rd. San Diego , CA 92121	
Bio-Rad Laboratories - Life Science Group Div.	Heidemannstr. 164 D-80937 München; 2000 Alfred Nobel Dr. Hercules , CA 94547	<a href="http://www.discover.bio-rad.com">www.discover.bio-rad.com</a>
GeneCraft ®	Tresckowstr. 10 D-48163 Münster	<a href="http://www.genecraft.de">www.genecraft.de</a>
ICN Biomedicals Inc.	Thüringer Str. 15 D-37269 Eschwege; 3300 Hyland Ave. Costa Mesa , CA 92626	<a href="http://www.icnbiomed.com">www.icnbiomed.com</a>
Invitrogen Corporation: Comprising products from Invitrogen, NOVEX, and Gibco BRL	Emmy-Noether-Str. 10 D-76131 Karlsruhe 1600 Faraday Avenue Carlsbad , CA 92008	<a href="http://www.invitrogen.com">www.invitrogen.com</a>
Metabion GmbH	Am Klopferspitz 19 D-82152 Martinsried	<a href="http://www.metabion.com">www.metabion.com</a>

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<b>Supplier</b>	<b>Location</b>	<b>URL</b>
Mobitec	Lotzestr. 22a D-37083 Göttingen	<a href="http://www.probes.com">www.probes.com</a>
Molecular Probes Inc.	4849 Pitchford Ave Eugene , OR 97405-9165	
New England Biolabs GmbH	Bruningstr. 50 D-65926 Frankfurt a. M.	<a href="http://www.neb.com">www.neb.com</a>
New England Biolabs Inc.	32 Tozer Rd. Beverly , MA 01915-5599	
QIAGEN GmbH	Max-Volmer-Str. 4 D-40724 Hiden	<a href="http://www.qiagen.com">www.qiagen.com</a>
QIAGEN	28159 Avenue Stanford Valencia , CA 91355	
Roche Molecular Biochemicals	Sandhofer Str. 116 D-68305 Mannheim	<a href="http://www.roche-applied-science.com">www.roche-applied-science.com</a>
Sigma-Aldrich	Eschenstr. 5 D-82024 Taufkirchen 3050 Spruce St. St. Louis , MO 63103	<a href="http://www.sigma-aldrich.com">www.sigma-aldrich.com</a>
Stratagene Europe	Hogehilweg 15 NL-1101 CB Amsterdam	<a href="http://www.stratagene.com">www.stratagene.com</a>
Stratagene	11011 N. Torrey Pines Rd. La Jolla , CA 92037	

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## D. Reprint

Part of this thesis is being published in:

**Prinz,I.**, Zerrahn,J., Kaufmann,S.H., and Steinhoff,U. (June 2002). Promiscuous peptide recognition of an autoreactive CD8<sup>+</sup> T cell clone is responsible for autoimmune intestinal pathology. *Journal of Autoimmunity*, 18, 281-287.