CATALOG NUMBER

101084 **0°C** **RIBONUCLEASE B** — 50 mg, 100 mg, 500 mg, 1 g
From Beef Pancreas
Activity: 50 Kunitz units/mg.
Salt and protease free
Prep'd from cryst. RNase

104907 **0°C** **RIBONUCLEASE B** — 10 mg, 100 mg, 500 mg
Lyophilized; Phosphate Free
Essentially protease-free
Activity: Approx. 100 Kunitz units/mg

152025 **0°C** **RIBONUCLEASE H** — 25 U, 100 U
[9050-76-4]
From *E. coli*
RNase H is an endonuclease that cleaves the RNA of RNA-DNA hybrids, producing a 3′-hydroxyl and a 5′-phosphate at the cleavage point. However, RNase H does not hydrolyze either RNA-RNA or DNA-DNA hybrids, or single-stranded RNA or DNA.
Unit Definition: One unit is the amount of enzyme required to produce 1 nmole of acid-soluble ribonucleotides from [^{3}H]poly(A) ù poly(dT) in 20 min, at 37°C
Our RNase H has been tested for contaminating DNase, endonuclease, RNase III and non-specific RNase.
Offered in a 25 mM HEPES buffer, pH 8.0, 50 mM KCl, 1 mM DTT in 50% glycerol.
Ref.: Donis-Keller, H., Nucleic Acids Res., **1**, 179 (1979); (2) Okayama, H., Berg., P., Mol. Cell. Biol., **2**, 161 (1982).

101079 **0-5°C** **RIBONUCLEASE T_1** — 100 KU, 500 KU
[9026-12-4]
From *Aspergillus oryzae,*
E.C.3.1.27.1
Suspension in 0.70 saturated ammonium sulfate. Highly purified.
Activity: >300,000 units/mg.
Unit Definition: One unit will produce acid soluble oligonucleotides to cause a ΔA_{260} of 1.0 at pH 7.5 and 37°C.

SP6 RNA POLYMERASE
Isolated from SP6 phage-infected *Salmonella typhimurium.* The enzyme is very specific for the SP6 phage promoter sequences in DNA. These promoter sequences, when inserted into cloning vectors, can be used to synthesize refined RNA transcripts from the cloned DNA sequence. These transcripts are useful as hybridization probes and substrates for RNA processing.
Unit Definition: One unit incorporates 1.0 nmol ATP into an acid soluble form in one hour at 37°C.
Shipping & Storage: Solution in 100 mM NaCl, 50 mM Tris-HCl, pH 7.9, 1 mM EDTA, 20 mM 2-mercaptoethanol, and 50% glycerol.
Shipped on dry ice.

800709 — 200 U
800710 — 1 KU

CATALOG NUMBER

800711 **-20°C** **T_7 RNA POLYMERASE** — 5 KU
Isolated from *E. coli*
The enzyme is very specific for T_7 promoters. These promoter sequences, when inserted into cloning vectors, can be used to synthesize RNA transcripts of the cloned DNA sequences. These transcripts are useful as hybridization probes and substrates for RNA systems.
Unit Definition: One unit catalyzes the incorporation of 1 nmol of labeled ribonucleotide into acid precipitable material in one hour at 37°C.
Shipping & Storage: Solution in 20 mM potassium phosphate, pH 7.5, 0.1 mM EDTA, 0.1 mM DTT and 50% glycerol.
Shipped on dry ice.

Expedite Your T7/SP6 Transcription With ICN.

- SP6/T7 Polymerase
- SP6/T7 Primers
- α-^{32}P Ribonucleotides
- *Ultra-Pure* Reagents
- Linbro® MicroTubes
- Cloning Vectors
- Restriction Enzymes
- Buffers
- *And Much More...*

152031 **-20°C** **T_7 RNA POLYMERASE** — 5 KU, 25 KU
T_7 RNA Polymerase is a DNA dependent RNA polymerase which has specificity for T_7 phage promoters. This allows the enzyme to efficiently synthesize *in vitro* transcripts from almost any DNA that is downstream from a T_7 promoter.
Unit Definition: One unit is the amount of enzyme required to incorporate 1 nmol of labelled UTP into acid-soluble material in 60 min at 37°C.
Supplied in a 50 mM Tris-HCl buffer, pH 7.9, 0.1M NaCl, 0.1 mM EDTA, 1.0 mM dithiothreitol and 50% glycerol.
Ref.: (1) Chamberlin, M., and Ring, J., J. Biol. Chem., **248**, 2235-2244 (1973); (2) Tabor, S., and Richardson, C.C., Proc. Natl. Acad. Sci. USA, **82**, 1074-1078 (1985).

CLONING AND EXPRESSIONS VECTORS

3131010 **-20°C** **AURORA™ AP BASIC REPORTER VECTOR** — 20 µg
Reporter vector (pSEAP) for expressing Secreted Alkaline Phosphatase (SEAP) in mammalian cells.
Lacking eukaryotic promoter and enhancer sequences, it serves as either a negative control or cloning vehicle for strong promoters. The SEAP gene is followed by the SV40 late polyadenylation and transcription pause sites (reduces background transcription). An f1 origin of replication allows for single-stranded DNA production. The pUC19 origin and ampicillin resistance gene allow for propagation and selection in *E. coli.*

3131040 **-20°C** **AURORA™ AP CONTROL REPORTER VECTOR** — 20 µg
AP Control Vector with the SV40 early promoter inserted upstream and enhancer inserted downstream of the SEAP gene.
The promoter sequence contains the SV40 origin of replication useful in cells expressing the T-antigen of SV40. It is useful as a positive control or as a reference for comparing the activities of promoters and enhancers.

Molecular Biology

DNA Plasmid Vectors

CATALOG NUMBER

3131030 **-20°C** **AURORA™ AP ENHANCER REPORTER VECTOR** — 20 µg
AP Enhancer Vector with the SV40 enhancer downstream of the SEAP gene.
Ideal for the study of promoters cloned into the multiple cloning sites. Potentially, the SV40 enhancer can increase the transcriptional activity of weak promoters inserted in the MCS.

3131020 **-20°C** **AURORA™ AP PROMOTER REPORTER VECTOR** — 20 µg
AP Basic Vector that includes the SV40 early promoter (no enhancer) inserted upstream of the SEAP gene.
The promoter fragment includes an SV40 origin of replication for expression in cells that actively express the SV40 T-antigen. pSEAP Promoter Vector may be used to analyze enhancer sequences cloned into one of the unique sites in the vector.

0921100 **-20°C** **AcMNPV C6 Wild Type Virus** — 2 ml

0910400 **-20°C** **pAcUW31 TRANSFER VECTOR** — 15 µg
Transfer vector for high-level expression of cloned genes under the control of **two** potent AcMNPV polyhedrin promoters.
Designed for high level expression of two different genes in the same cell.
Complete construct information is available upon request.

0910100 **-20°C** **BAC-UP6 VIRAL DNA** — 15 µg
Derivative of AcMNPV that facilitates the production of recombinant viral expression vectors from AcMNPV transfer vectors.
A transfection reagent is provided with Bac-Up6 DNA for efficient co-transfections.

0910200 **-20°C** **pBAC-UP8** — 15 µg
Transfer vector for high-level expression of cloned genes under the control of the potent AcMNPV polyhedrin promoter.
Complete construct information is available upon request.

0910300 **-20°C** **pBAC-UP9** — 15 µg
Transfer vector for high-level expression of cloned genes under the control of the potent AcMNPV polyhedrin promoter.
Complete construct information is available upon request.

0920200 **-20°C** **BAC-UP BACULOVIRUS EXPRESSION KIT** — 1 kit
The complete kit includes the following material, sufficient to perform 5 transfections:

- 2 Different transfer vectors for high-level expression of cloned genes driven by the potent AcMNPV polyhedrin promoter.
- Bsu36 I viral DNA digest.
- Transfection reagent.
- IPLB-Sf21 *Spodoptera frugiperda* cells.
- Positive control virus stock.
- Negative control AcMNPV wild-type virus.
- Bac1 sequencing/PCR Primer.
- Bac2 sequencing/PCR Primer.
- Positive control plasmid pBac-up8-GUS.

0921000 **-20°C** **BAC-UP VIRUS STOCK** — 2 ml

CATALOG NUMBER

DNA PLASMID VECTORS

821220 **LAMBDA gt10 VECTOR** — 10 µg
λgt 10 is a 43.34 Kb insertion vector with a unique EcoR I restriction site within the repressor (cl) gene. It can accept restriction fragments up to approximately 7.5 Kb in length, such as cDNA molecules with EcoR I ends. λgt 10 does not require an insert to be packageable and is thus much more efficient at cloning smaller fragments, such as cDNA molecules of 400-1500 base pairs, than other related lambda insertion vectors.
λgt 10 is supplied as an aqueous solution in 10 mM tris HCl, pH 8.0, 1 mM EDTA at a concentration of 0.5 µg/µl.

821221 **LAMBDA gt11 VECTOR** — 10 µg
λgt 11 is a 43.70 Kb expression vector containing a unique EcoR I restriction site within lacZ gene positioned 53 bp upstream from the termination codon. Open reading frames within the inserted DNA fragments may be expressed as fusion proteins with the lacZ gene product, β-galactosidase. Libraries constructed in λgt 11 can be screened using antibody probes that recognize antigens specified by the insert DNA. The functional β-galactosidase of gt 11 is usually inactivated by insertion of foreign DNA and the percentage of recombinants can easily be seen by the relative number of blue and clear plaques when libraries are plated in the presence of X-gal and IPTG.
λgt 11 is supplied as an aqueous solution in 10 mM tris HCl, pH 8.0, 1 mM EDTA at a concentration of 0.5 µg/µl.

ICN Reagents for Lambda Library Screening:

- *Protein-A, [^{125}I]*
- *Biotrans™ PVDF*
- *Petri Plates*
- *Ampicillin*
- *Agar*
- *Antibodies*
- *IPTG*

197101 **0-5°C** **LAMBDA PHAGE DNA** — 500µg, 2mg
Produced from a *C1857 S7 Lysogen of E. coli*
200-400 µg. as determined by absorbancy at 260 nm.
One OD_{260} unit is approximately 50 micrograms of Lambda DNA. Optical density ratios are used as a criterion of purity, with a typical analysis giving A_{250}/A_{260} = .89 at pH 7.0 and A_{250}/A_{260} = .52 at pH 7.0.
The viral DNA is extracted by a modification of the phenol method described by Kaiser and Hogness.

Ref.: 1. Hedgpeth, J., Goodman, H.M., and Boyer, H.W., Proc. Nat. Acad. Sci. USA, **69**, 3448 (1972).
2. Kaiser, A.D., and Hogness, D.S., J. Molec. Biol., **2**, 392 (1960).