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## Agarase

### (Streptomyces sp.)

Cat. No.	size
E4800-01	100 u
E4800-02	500 u

### Unit Definition:

One unit is the amount of enzyme required to completely degrade 200  $\mu$ l of molten 1% low melting point agarose in reaction buffer in 1 hour at 42°C. After digestion, agarose will not solidify when incubated at 4°C for 1 hour.

Note: we recommend using 1  $\mu$ l of the enzyme per 0.2 g of 1% agarose gel.

#### **Storage Conditions:**

Store at -20°C.

### **References:**

1. Stanier, R.Y. (1942) J. Bacteriol. 44, 555.

 $\beta$ -agarase that cleaves  $\beta$  1-4 bonds in agarose, yielding soluble oligosaccharide multimers of neoagarobiose, thus allowing for a simple, quantitative recovery of intact nucleic acids from agarose gels.

#### Description:

- Digests the polysaccharide backbone of agarose yielding ethanol soluble oligosaccharides (1). The resulting carbohydrate molecules no longer gel or interfere with subsequent DNA manipulations.
- Allows for simple, quantitative recovery of intact nucleic acids from agarose gels.
- Suitable for purification of various DNA fragments ranging in size from large (>50 kb) down to small (<50 kb) ones.
- Ideal for quantitative recovery of high molecular weight DNA from low-melting agarose gels.
- Can be heat inactivated (2 min at 95°C or 15 min at 65°C)
- Compatible with resin-based DNA purification schemes (i.e. EURx E3520).

#### **Reaction Conditions:**

1 x TAE electrophoresis buffer: 40 mM Tris-acetate, 1 mM EDTA, pH 8.0.

### **Quality Control:**

All preparations are assayed for contaminating endonuclease and nonspecific RNase and single- and double-stranded DNase activities. Typical preparations are greater than 95% pure, as judged by SDS polyacrylamide gel electrophoresis.