

## Product Information

## Proteinase K-Agarose

Lyophilized Powder, Proteinase K from *Tritirachium album*

**P9290**

Storage Temperature: 2-8 °C

### Product Description

Proteinase K is a serine protease with broad substrate specificity.<sup>1-3</sup> It degrades many proteins in the native state even in the presence of detergents. Proteinase K was isolated from a fungus able to grow on keratin (hair). Its ability to digest native keratin gave the enzyme its name "Proteinase K".<sup>4</sup> Proteinase K requires 1–5 mM Ca<sup>2+</sup> for activation.

Proteinase K is used in molecular biology research to digest unwanted proteins, such as nucleases from DNA or RNA preparations from microorganisms, cultured cells, and plants.<sup>5-11</sup> Proteinase K has been used to remove endotoxins bound to such cationic proteins as lysozyme and RNase A.<sup>12</sup>

This Proteinase K-Agarose product is prepared by the immobilization of proteinase K, originally isolated from *Tritirachium album*, to activated crosslinked beaded agarose. Several references have cited use of this product in their research applications.<sup>13-22</sup>

### Precautions and Disclaimer

This product is for R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

### Product

This Proteinase K-Agarose product is sold as a lyophilized powder stabilized with lactose.

### Preparation

General instructions for re-suspension of our enzyme-agarose conjugates include the following steps:

1. Suspend the lyophilized enzyme-agarose to 5-10 mg solid/mL water.
2. Allow brief hydration of the lyophilized powder.
3. Filter and wash the rehydrated enzyme-agarose product several times with either water or your intended buffer.
4. Re-suspend the enzyme-agarose in your intended buffer. The product is now ready for use.

### Storage/Stability

For re-use of our enzyme-agarose conjugates, the following steps may be used as a general guide:

- Wash the enzyme-agarose with water and/or buffer until it is free of substrates.
- For long-term storage, enzyme-agarose products may be re-converted to their dry form, if desired, as follows:
  - Wash the enzyme-agarose with the buffer of choice.
  - Drain excess buffer.
  - Dry the enzyme-agarose in a vacuum desiccator.
  - Store the freshly lyophilized enzyme-agarose at 2–8 °C.

## References

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