

Product Information

HEMOCYANIN, KEYHOLE LIMPET-AGAROSE

Product No. **H 5779**

Keyhole Limpet Hemocyanin (KLH)-Agarose is prepared by conjugation of KLH to CNBr-activated agarose at 3-4 mg protein/ml gel bed volume.

Description

Keyhole Limpet Hemocyanin (KLH), isolated from the hemolymph of the mollusk *Megathura crenulata*, belongs to a large family of giant respiratory proteins called hemocyanins which are found in mollusks and arthropods. KLH is one of the most commonly used carrier protein in immunizations. It is a powerful immunogen, capable of eliciting antibodies against low molecular weight, non-immunogenic haptens (peptides, hormones and drugs), when these are covalently conjugated to the carrier protein.^{1,2,3} For instance, KLH is often used as a carrier for conjugation of synthetic peptides and the purified conjugates are subsequently used for immunization.³ Immunizations using hapten-KLH conjugates may result in the generation of antibodies to KLH in addition to specific antibodies to the hapten. Removal of antibodies to KLH may be desirable in cases of interference with hapten-specific antibodies, or in the case where a step of antibody enrichment/purification is required (e.g., removal of antibodies to KLH prior to preparation of IgG fraction, or an affinity purification step).

Uses

KLH-Agarose may be used for the adsorption of antibodies to KLH from whole antisera.

Binding Capacity

The KLH-Agarose performance was determined by the adsorption of antibodies to KLH. Adsorption capacity is at least 10 mg of Anti-KLH/ml agarose. For the adsorption of antibodies to KLH from various antisera it is recommended to determine the optimal amount of immunoadsorbent and antiserum by titration.

Storage

For continuous use store at 2-8 °C in the presence of 15mM sodium azide. **Do Not Freeze.**

Reagents

The product is supplied in 0.01 M phosphate buffered saline, pH 7.4, containing 15mM sodium azide as preservative.

Precaution and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

References

1. Harlow, E. and Lane D., *Antibodies: A Laboratory Manual*. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., (1988).
2. Shuler, K., et al., *J. Immunol. Meth.*, **156**, 137 (1992)
3. Van Regenmortel, M.H., et al., In: "Synthetic Polypeptides as Antigens," Burdon, R., and Van Knippenberg, P., (Eds.), Elsevier Science Publ. (1988).
4. Markl, J. et al., *Naturwissenschaften*, **78**, 512 (1991).
5. Hersckovits, T., *Comp. Biochem. Physiol.* **91B**, 579 (1988).

2/98