

Datasheet for ABIN726539 **anti-KLH antibody (HRP)**

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Overview

Quantity:	100 µL
Target:	KLH
Reactivity:	Keyhole Limpet
Host:	Mouse
Clonality:	Polyclonal
Conjugate:	This KLH antibody is conjugated to HRP
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH protein
Isotype:	IgG
Purification:	Purified by Protein A.

Target Details

Target:	KLH
Abstract:	KLH Products
Background:	Keyhole limpet hemocyanin is an extremely large, heterogeneous glycosylated protein consisting of subunits with a molecular weight of 350,000 and 390,000 in aggregates with molecular weights of 4,500,000-13,000,000. Each domain of a KLH subunit contains two copper atoms that together bind a single oxygen molecule (O ₂). When oxygen is bound to hemocyanin, the molecule takes on a distinctive transparent, opalescent blue color. The KLH

Target Details

protein is potently immunogenic yet safe in humans and is therefore highly prized as a vaccine carrier protein. The large and highly glycosylated KLH protein cannot be reproduced synthetically. It is available only as a purified biological product from the Keyhole Limpet *Megathura crenulata*. Keyhole limpet hemocyanin (KLH) is used extensively as a carrier protein in the production of for research, biotechnology and therapeutic applications. Haptens are substances with a low molecular weight such as peptides, small proteins and drug molecules that are generally not immunogenic and require the aid of a carrier protein to stimulate a response from the immune system in the form of antibody production.[2] KLH is the most widely employed carrier proteins for this purpose. KLH is an effective carrier protein for several reasons. Its large size and numerous epitopes generate a substantial immune response, and abundance of lysine residues for coupling haptens, allows a high hapten:carrier protein ratio increasing the likelihood of generating hapten-specific . In addition, because KLH is derived from the limpet, a gastropod, it is phylogenetically distant from mammalian proteins, thus reducing false positives in immunologically based research techniques in mammalian model organisms. KLH may also be a challenging molecule to work with because of its propensity to aggregate and precipitate. Aggregates remain immunogenic, but limit the ability to conjugate haptens and are difficult to manipulate in the laboratory.

Synonyms: Keyhole limpet hemocyanin KLH

Application Details

Application Notes:	WB 1:100-1000 IHC-P 1:100-500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % Gentamicin.
Preservative:	Gentamicin sulfate
Precaution of Use:	This product contains Gentamicin sulfate: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do NOT add Sodium Azide! Use of Sodium Azide will inhibit enzyme activity of horseradish peroxidase.

Handling

Storage:	4 °C
Storage Comment:	Store at 4°C
Expiry Date:	12 months