

## Datasheet for ABIN5005901

# anti-KLH antibody (AbBy Fluor® 750)



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Quantity:	100 μL
Target:	KLH
Reactivity:	Others
Host:	Mouse
Clonality:	Polyclonal
Conjugate:	This KLH antibody is conjugated to AbBy Fluor® 750
Application:	Immunofluorescence (Paraffin-embedded Sections) (IF (p))

### **Product Details**

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

## **Target Details**

Target:	KLH	
Alternative Name:	KLH (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 (O2). When oxygen is bound to hemocyanin, the molecule takes on a distinctive transparent, opalescent blue color. The KLH 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:	IF(IHC-P) 1:50-200	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Concentration:	1 μg/μL	
Buffer:	Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % sodium azide.	
Storage:	4 °C	
Storage Comment:	Store at 4°C	
Expiry Date:	12 months	