

KPL Peroxidase-Labeled Protein A from *S. aureus*

Catalog No.
5220-0376 (14-50-00)

Size
0.5 mg

DESCRIPTION

Chromatographically purified Protein A obtained from *Staphylococcus aureus* and labeled with horseradish peroxidase.

FORM/STORAGE

Lyophilized. Store at 2–8°C until rehydrated. Stable for a minimum of one year at 2 – 8°C.

STABILIZER AND PRESERVATIVE

Bovine serum albumin (BSA) added as protein stabilizer. No preservatives added. DO NOT USE SODIUM AZIDE. Non-sterile.

E/P RATIO

Molar enzyme/antibody protein ratio = 2:1

SPECIFICITY/CROSS-REACTIVITY

KPL Peroxidase-labeled Protein A adheres to the IgG of most animals¹ (Table 1). The affinity of Protein A to immunoglobulins increases with increasing pH to pH 8.5 and with increasing ionic strength to 0.3M. Low concentrations (0.05%) of Tween 20 markedly reduce the affinity of Protein A for IgG. To obtain optimal performance of this reagent, the user must adjust the pH, conductivity and detergent level to the needs of his experiment. SeraCare tests each lot of Protein A for reactivity to human, rabbit, mouse and swine IgG only.

TABLE 1

SPECIES	CLASSES/SUBCLASSES THAT PROTEIN A BINDS
Human	IgG ₁ , IgG ₂ , IgG ₄ and IgA ₂
Rabbit	IgG and some IgM
Mouse	IgG _{2a} , IgG _{2b} , IgG ₃ and some IgG ₁
Sheep	IgG ₂
Goat	IgG ₂
Rat	IgG ₁ and IgG _{2c}
Dog	IgG _a , IgG _b , IgG _c , IgG _d , IgA and some IgM
Guinea Pig	IgG ₁ and IgG ₂
Pig	IgG
Cow	IgG ₂

REHYDRATION AND STORAGE

Rehydration:

Rehydrate with 1 mL of reagent quality water. Dilute to desired concentration with PBS or other buffer.

Storage:

This product may be stored for up to 1 week refrigerated; thereafter, it should be stored frozen. When frozen, product is stable for a minimum of 1 year.

NOTE: Variations in temperature due to freeze/thaw cycles may cause loss of activity when rehydrated product is stored frozen in aliquots less than 50 µL.

SUGGESTED WORKING CONCENTRATION

Different assay conditions require that serial dilutions of all reagents be performed to determine optimal working concentrations. Prepare working dilution immediately before use. Storage at working dilution may result in enzyme inactivation and performance loss. Suggested starting concentrations are as follows:

Microwell Plate Immunoassays:	1/500 (1.0 µg/mL)
Membrane Immunoassays:	1/2500 (0.2 µg/mL)
Histo/Cytochemical Procedures:	1/100 (5.0 µg/mL)

PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by the Hazard Communications Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Disposal via sanitary sewer.

RELATED PRODUCTS

	CAT. NO.
KPL 10% BSA	5140-0006 (50-61-00)
Diluent/Blocking Solution	
KPL Coating Solution	5150-0014 (50-84-00)
KPL Milk Diluent/Blocking Solution	5140-0011 (50-82-01)

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.