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cappel

PEROXIDASE-CONJUGATED PROTEIN A

2MG

Catalog #: 55901

Lot #: 01332

Elisa Titer 1:48,000

Form: Liquid. The product is in 10mM phosphate, 0.15M NaCl buffer, pH 7.4, 1% ovalbumin, 40% glycerol containing 0.1% proclin as preservative.

Description: This product is a conjugate of Protein A and highly purified ($R_z > 3.0$) horseradish peroxidase.

Protein A is a component of the cell wall of *Staphylococcus aureus* (Cowan 1 Strain), and binds to the Fc portion of immunoglobulin molecules of most mammalian species. It is composed of a single polypeptide chain of molecular weight 42,000. Protein A binds IgG molecules and, in some cases, IgM and IgA.

Uses: Peroxidase-Conjugated Protein A is a versatile reagent which is useful in many immunological assay systems. It is intended for use in cell and tissue staining, dotting and blotting, ELISA and other immunoassays. For each specific experiment, the product should be titered to maximize signal to background.

Technique: Cell/tissue staining

Dotting/blotting 1:500 - 1:1,000

Enzyme Immunoassays

Substrate solution = 1 mM ABTS in 0.1M citrate buffer, pH 4.2, containing 0.03% hydrogen peroxide.

Suggested Trial

Dilutions: 1:100 - 1:200

1:8,000 - 1:16,000

Storage: Store unopened product at 2-8°C. Do not freeze. If accidentally frozen, centrifuge to clarify and precipitate before use.

Binding

Characteristics

of Protein A^{5,6}: Species Classes/Subclasses Bound

Human IgG₁, IgG₂, IgG₄ and IgA

Rabbit IgG and some IgM

Mouse IgG_{2a}, IgG_{2b}, IgG₃ and some IgG

Sheep IgG₂

Goat IgG₂

Rat IgG₁ and IgG_{2c}

Dog IgG_a, IgG_b, IgG_c, IgG_d, IgA and some IgM

Guinea Pig IgG₁ and IgG₂
Pig IgG
Cow IgG₂

Note: Consult references for specific binding conditions for given classes/subclasses

- References:**
1. Biberfeld, P., Ghetie, V. and Sjoquist, J., Demonstration and assaying of IgG antibodies in tissue and on cells by labeled staphylococcal Protein A. **J. Immunol. Meth.** 6, 249-259, 1975.
 2. Goodling, J.W., Use of staphylococcal Protein A as an immunological reagent. **J. Immunol. Meth.** 20, 241-253, 1978.
 3. Grangeot-Keros, L. et al., A critical study of the use of staphylococci containing Protein A for separation of IgG and IgM antibodies. **J. Immunol. Meth.** 5, 183-195, 1982.
 4. Hsu, S. and L. Raine, Protein A, avidin and biotin in immunochemistry. **J. Histochem. Cytochem.** 29, 1349-1353, 1981.
 5. Richman, D., Cleveland, P. Oxman and Johnson, K., The binding of staphylococcal Protein A by the sera of different animals. **J. Immunology** 5, 2300-2305, 1982.
 6. Lindmark, R., Thoren-Tolling, K. and Sjoquist, J., Binding of immunoglobulins to Protein A and immunoglobulin levels in mammalian sera. **J. Immunology** 62, 1-13, 1983.

Related Product Ordering Information:

<u>Catalog #</u>	<u>Description</u>	<u>Size</u>
55832	Protein A	2 mg
55965	Alkaline Phosphatase-Conjugated Protein A	2 mg
55908	Purified Human IgG	50 mg
55944	Purified Rabbit IgG	50 mg
36315	DAB	6x1 ml
36317	OPD	6x1 ml
36318	TMB	6x1 ml
36319	ABTS\	6x1 ml

ABTS is a registered trademark of Boehringer Mannheim GmbH.

This product is intended for Research Use Only, "for Tests *in vitro*", not for use in diagnostic or therapeutic procedures involving humans or animals.


Approved by: Joseph Dietz, Ph.D.
Quality Control Director

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