Innova Biosciences

Protein A

858-0005 1mg salt free lyophilized Protein A
858-0010 5mg salt free lyophilized Protein A

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Introduction

Protein A is a 42 kDa protein which has a high affinity for the Fc region of IgG molecules. It binds to immunoglobulins from a wide variety of species (see Appendix 1) and is an extremely versatile reagent that is employed in many immunoassays.

Purified protein A is often used to coat immunoassay plates in order to orient antibody molecules via their Fc domains. In this orientation both binding arms of the antibody are available for interactions with the antigen.

Protein A may also be immobilized on a solid support such as CNBr-activated agarose for the purification of either monoclonal or polyclonal antibodies.

Storage of lyophilized protein A

Protein A is shipped at ambient temperature as a lyophilized salt free powder at and should be stored at +4°C or -20°C.

Reconstitution

Reconstitute to a concentration of 1mg/ml in water, PBS or TBS.

Storage of solutions

Store at 4°C. For long-term storage, small aliquots may be stored at -70°C. Avoid repeated cycles of freeze-thaw.

Related Products

850-0005 Protein A - Peroxidase
850-0005 Protein A -Alkaline Phosphatase
851-0024 Protein A -Agarose

Appendix 1. Binding of protein A to immunoglobulins

Species	Ig	Binding strength
Rabbit	IgG	High
Human	IgG	High
Pig	IgG	High
Mouse	IgG_1	Medium/High*
Mouse	IgG_{2a}	High
Mouse	IgG_{2b}	High
Mouse	IgG_3	High
Goat	IgG	Low/medium
Sheep	IgG	Low/medium
Rat	IgG	Low/medium
Mouse	IgM	Low/medium
Rabbit	IgM	Low

* If you are working with mouse monoclonal antibody of IgG_1 subclass the binding strength with protein A will be increased at pH 8.1. For other mouse subclasses, PBS or TBS formulations at pH 7.4 are fine.

For data on other species/subclasses see Lindmark et al., J. Immunol. Methods 62 (1983) 1-13.

For further information and related detection reagents see www.innovabiosciences.com