



## BTS Provides the Best tools for Protein Purification!

# PROTEIN A AGAROSE BEADS

## GENERAL DESCRIPTION

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Protein A is a cell wall component of *Staphylococcus aureus*. It consists of a single polypeptide chain shaped as a cylinder, which contains five antibody-binding domains. These high affinity regions are specifically bonded to Fc region of the immunoglobulins (specially IgGs of different species).

Protein A is temperature stable and it retains its native conformation even in the presence of denaturalizing agents. Protein A resins have been widely used to purify a wide range of immunoglobulins of different mammalian species and also to purify certain IgG subclasses that have no affinity.

### RELATIVE AFFINITY OF IMMOBILIZED PROTEIN A FOR VARIOUS SPECIES AND SUBCLASSES OF POLYCLONAL AND MONOCLONAL IgGs<sup>(1)</sup>

SPECIES / SUBCLASS	PROTEIN A	SPECIES / SUBCLASS	PROTEIN A
<i>Monoclonal</i>		<i>Polyclonal</i>	
Human		Rabbit	++++
IgG <sub>1</sub>	++++	Cow	++
IgG <sub>2</sub>	++++	Horse	++
IgG <sub>3</sub>	—	Goat	-
IgG <sub>4</sub>	++++	Guinea pig	++++
Mouse		Sheep	+/-
IgG <sub>1</sub>	+	Pig	+++
IgG <sub>2a</sub>	++++	Rat	+/-
IgG <sub>2b</sub>	+++	Mouse	++
IgG <sub>3</sub>	++	Chicken	---
Rat		Human IgG	++++
IgG <sub>1</sub>	—	Human IgM	---
IgG <sub>2a</sub>	—	Human IgD	---
IgG <sub>2b</sub>	—	Human IgA	---
IgG <sub>2c</sub>	+		

<sup>(1)</sup>Harlow, E. And Lane, D. eds. (1988). Antibodies, A. Laboratory Manual. Cold Spring Harbor Laboratory, N.Y., 617-618.

ABT offers Protein A products with competitive advantages compared to market standards:

- High IgG-binding capacity resin (around 25 mg human IgG / ml).
- Milder elution condition than Protein G resin.
- High stability binding of Protein A: resin is reusable with no significant loss of binding capacity.

ABT offers different product formats:

- Bulk Resins
- Pre-Packed Columns