

## Bovine Serum Albumin Conjugates

### Quick Facts

#### Storage upon receipt:

- $\leq -20^{\circ}\text{C}$
- Desiccate
- Protect from light

**Abs/Em:** See Table 1

### Introduction

Bovine serum albumin (BSA) conjugates are commonly used as tracers in applications where physical dimensions are important. Thus, fluorescent BSA conjugates have been used for quantitative studies of electroporation<sup>1</sup> and measurement of plasma volume in rats.<sup>2</sup> Other applications include studying the rate of receptor-mediated endocytosis and exocytosis<sup>3</sup> and following intracellular protein processing.<sup>4</sup> Molecular Probes offers a wide range of the BSA derivatives (Table 1).

### Materials

#### Contents

BSA conjugates are supplied as lyophilized powder in a unit size of 5 mg.

#### Storage

When stored desiccated at  $\leq -20^{\circ}\text{C}$ , these products are stable for at least one year. Solutions can be made by dissolving the

**Table 1.** Bovine serum albumin conjugates.

Cat #	Label	Ex *	Em *
A23018	DNP	357	N/A
A23015	fluorescein	494	520
A13100	Alexa Fluor® 488	497	520
A2750	BODIPY FL	501	509
A23016	tetramethylrhodamine	541	572
A34786	Alexa Fluor® 555	555	565
A23017	Texas Red®	596	615
A13101	Alexa Fluor® 594	590	622
A34785	Alexa Fluor® 647	650	668
A34787	Alexa Fluor® 680	679	702

\* Fluorescence excitation (Ex) and emission (Em) maxima, in nm.

powder in phosphate-buffered saline, pH 7.4 (PBS) or in another desired buffer. Store the solutions at  $2-6^{\circ}\text{C}$  with the addition of sodium azide at a final concentration of 2 mM. For longer storage, divide the solutions into aliquots and freeze at  $\leq -20^{\circ}\text{C}$ . **PROTECT FROM LIGHT. AVOID REPEATED FREEZING AND THAWING.**

It is good practice to centrifuge the protein conjugate solutions briefly in a microcentrifuge before use; only the supernatants should then be added to the experiment. This step will eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining.

### Properties

The molecular weight of bovine serum albumin is approximately 66,000 daltons. Peak excitation and emission wavelengths for each conjugate are listed in Table 1.

### References

1. Biophys J 65, 414 (1993);
2. J Appl Physiol 76, 485 (1994);
3. Biol Cell 90, 169 (1998);
4. Cytometry 28, 25 (1997).

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**Product List** *Current prices may be obtained from our website or from our Customer Service Department.*

Cat #	Product Name	Unit Size
A13100	albumin from bovine serum (BSA), Alexa Fluor® 488 conjugate.....	5 mg
A34786	albumin from bovine serum (BSA), Alexa Fluor® 555 conjugate.....	5 mg
A13101	albumin from bovine serum (BSA), Alexa Fluor® 594 conjugate.....	5 mg
A34785	albumin from bovine serum (BSA), Alexa Fluor® 647 conjugate.....	5 mg
A34787	albumin from bovine serum (BSA), Alexa Fluor® 680 conjugate.....	5 mg
A2750	albumin from bovine serum (BSA), BODIPY® FL conjugate.....	5 mg
A23015	albumin from bovine serum (BSA), fluorescein conjugate.....	5 mg
A23016	albumin from bovine serum (BSA), tetramethylrhodamine conjugate.....	5 mg
A23017	albumin from bovine serum (BSA), Texas Red® conjugate.....	5 mg
A23018	albumin from bovine serum (BSA), 2,4-dinitrophenylated (DNP-BSA).....	5 mg

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**Contact Information**

Further information on Molecular Probes products, including product bibliographies, is available from your local distributor or directly from Molecular Probes. Customers in Europe, Africa and the Middle East should contact our office in Paisley, United Kingdom. All others should contact our Technical Service Department in Eugene, Oregon.

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