## **INSTRUCTIONS**

# NeutrAvidin Biotin-Binding Protein

## 31000 31050 31055

Number	Description
31000	NeutrAvidin Biotin-Binding Protein (salt-free), 10mg
31050	NeutrAvidin Biotin-Binding Protein (salt-free), 100mg
31055	NeutrAvidin Biotin-Binding Protein (salt-free), 1000mg
	Solubility: ~10mg/mL in ultrapure water
	Specific Activity: 11-17µg biotin bound/mg protein
	Extinction Coefficient: 1.66 at 1mg/mL and 280nm

Storage: Upon receipt store product 4°C. Product is shipped at ambient temperature.

#### Introduction

The Thermo Scientific<sup>™</sup> NeutrAvidin<sup>™</sup> Biotin-Binding Protein is an excellent alternative to avidin or streptavidin when nonspecific binding must be minimized. NeutrAvidin Protein is an avidin derivative that combines several key features to provide a biotin-binding protein with exceptionally low nonspecific binding properties. NeutrAvidin Protein does not contain carbohydrate, thus eliminating the potential for binding to lectins while maintaining stability and biotin-binding ability.

The relatively neutral isoelectric point (6.3 + 0.3) of NeutrAvidin Protein is achieved through modification of charged groups on its surface. This modification ensures that sufficient lysines remain available on the protein's surface, so that conjugates can be successfully prepared through traditional amine-reactive chemistries.

### **Important Product Information**

- Reconstitute NeutrAvidin Protein with ultrapure water and then dilute to 1mg/mL with PBS or other buffer. NeutrAvidin Protein is not directly soluble in phosphate-buffered saline (PBS).
- NeutrAvidin Protein can precipitate in solutions close to its isoelectric point (6.3 ± 0.3). Solutions containing 10% glycerol may aid initial solubilization and prevent precipitation. Glycerol does not interfere with NeutrAvidin Protein's ability to bind biotin.

#### **Related Thermo Scientific Products**

NeutrAvidin Agarose, 5mL
${\bf NeutrAvidin, Horseradish \ Peroxidase \ Conjugated, 2mg}$
NeutrAvidin, Alkaline Phosphatase Conjugated, 2mg
NeutrAvidin, Fluorescein Conjugated, 5mg
Maleimide-Activated NeutrAvidin Protein, 5mg

#### References

Woolley, D.W. and Longsworth, L.G. (1942). Isolation of an antibiotin factor from egg white. *J Biol Chem* **142**:285-90. Hiller, Y, *et al.* (1987). Biotin binding to avidin. Oligosaccharide side chain not required for ligand association. *Biochem J* **248**:167-71.







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