Creative Enzymes®

Native Chicken Egg White Avidin

Cat. No. NATE-0949

Lot. No. (See product label)

Introduction

Description	Avidin is a tetrameric protein. In chicken egg white, avidin makes up approximately 0.05% of total protein (approximately 1.8 mg per egg). The tetrameric protein contains four identical subunits (homotetramer) each of which can bind to biotin (Vitamin B7, vitamin H) with a high degree of affinity and specificity. Avidin's affinity for biotin is exploited in wide ranging biochemical assays, including Western Blot, ELISA, ELISPOT and pull-down assays. Avidin immobilized onto solid supports is also used as purification media to capture biotin-labelled protein or nucleic acid molecules. For example, cell surface proteins can be specifically labelled with membrane impermeable biotin reagent, then specifically captured using an avidin-based support. Avidin and biotin are routinely conjugated to indicator enzymes, such as alkaline phosphatase and horseradish peroxidase for use in diagnostic kit development and manufacturing.
Applications	Egg white Avidin can be used in assays for functionalized xenon as a biosensor to detect biotin-avidin binding. Egg white was used at 80 nmol.
Synonyms	Avidin

Product Information

Species	Chicken
Source	Chicken Egg White
Form	Lyophilized
EC Number	215-783-6
CAS No.	1405-69-2
Molecular Weight	64,000 (tetramer of 16,000 MW subunits)
Purity	Highly Purified
Activity	> 10 U/mg solid
Contaminants	Ash: < 0.1%
Unit Definition	One unit will bind one microgram of d-biotin.

Storage and Shipping Information

Storage	2-8°C
Stability	3 years