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Streptavidin

National Cancer Institute

Source

National Cancer Institute. *Streptavidin*. NCI Thesaurus. Code C17334.

A bacterial protein that has high affinity for biotin. The non-covalent streptavidin-biotin complex is resistant to organic solvents, denaturants, detergents, proteolytic enzymes, and extremes in temperatures and pH. The stability of the complex is leveraged by many research and clinical procedures including protein purification, chemiluminescent, fluorescent and colorimetric immunostaining, atomic force microscopy, synthesis of carbon nanotubes and DNA-based nanoparticles, and targeted immunotherapy.