

Certificate of Analysis

Adenovirus Type 5 purified Hexon antigen

Description: Purified hexon protein. Hexon is the major Adenovirus capsid protein. It is present as 240 copies which form 20 facets of the icosahedral capsid.

Organism: Adenovirus type 40

Product code: NAT41552-100

Batch number: 17071411

Amount: 0.1mg

Protein conc.: Adjusted to 0.291 mg/ml by BCA Assay, using BSA standards in 10mM Bis Tris Propane pH7.2

Purity: >95% pure by SDS-PAGE

Buffer: 10mM Bis Tris Propane pH7.2, 375 mM NaCl, 0.09% Sodium Azide

Short term storage: Ambient

Long term storage: Aliquot and freeze at less than -20°C, recommended at -80°C. Avoid multiple freeze/thawing and long-term storage at 4°C.

Hexon protein naturally self assembles as part of the virus life cycle. When the protein is purified we also see evidence of self assembly such as rapid loss of protein upon serial dilution and precipitation. The storage buffer and ELISA coating buffer play an important role in the likelihood of self assembly and thereby can affect results when using purified hexon as antigen in ELISAs and other such assays. Many common ELISA coating buffers increase self assembly in hexon protein as they are designed to increase efficiency of antigen adsorption. This results in a very high signal with the initial dilution but then the sensitivity tails off very rapidly. Diluting and coating the hexon in water alone slightly increases sensitivity but reduces strength; coating and diluting in the presence of a small amount of stabilising protein (such as BSA) seems to increase sensitivity for antigen coating significantly (although too much BSA can block high concentrations of hexon).

 03-OCT-2017

QC Officer

Date

