

## ProtTech Inc. 136 Green Tree Rd., Suite 180, Phoenixville, PA19460 Tel: 484-392-7035 Fax: 484-392-7031 Email: <u>info@prottech.com</u>

## Vaccinia Capping Enzyme

Cat.# PT-RNA-VCE-CAP-500 PT-RNA-VCE-CAP-5000

**Description:** The capping enzyme is composed of two subunits: D1 and D12. Eukaryotic RNA must undergo a series of modifications in order to be exported from the nucleus and successfully translated into function proteins, the first mRNA modification is capping.<sup>[1][2]</sup> 5' capping is essential for mRNA stability, enhancing mRNA processing, mRNA export and translation.<sup>[2]</sup>

**Quality control:** Verified by disulfide mapping and Mass Spectrometry analyses.

**Storage conditions:** – 20 C. Avoid repeated freeze-thaw cycles.

Purity: >95% by SDS-PAGE gel

Concentration: 0.25mg/mL

Formulation: 50% glycerol

Product Source: E. Coli

## **Reference:**

1. Watson J (April 8, 2014). Molecular Biology of the Gene. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press. pp. 429–455. ISBN 9780321762436.

2. Ghosh A, Lima CD (Jul–Aug 2010). "Enzymology of RNA cap synthesis". Wiley Interdisciplinary Reviews: RNA. 1 (1): 152–72. doi:10.1002/wrna.19. PMC 3962952. PMID 21956912.



Figure 1. Vaccinia Capping SDS PAGE gel Lane 1. Marker Lane 2. Capping Enzyme

The product includes the Capping Enzyme, Capping Buffer, Sadenosylmethionine (SAM) and GTP.

**Usage:** FOR LABORATORY RESEARCH USE ONLY.