Enzymax, LLC   Product Information

**870 Corporate Drive, suite 201,
Lexington, KY 40503**

Product Name: Tobacco dcapping enzyme   **Order: info@enzymax.net**
Catalog #:   87   **Tel: 859-219-8482**
Size: 10 μg   **Fax: 859-219-0653**
                                                                                         Web: www.enzymax.net

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Product: Tobacco decapping enzyme

Product Description or Background:

Tobacco decapping enzyme catalyzes decapping of mRNA, which is a critical step in eukaryotic mRNA turnover. This enzyme hydrolyzes methylated capped RNA (m7 GTP caps) to release m7GDP and 5′ monophosphorylated mRNA.

Source: Tobacco enzyme

Molecular Weight:

Full length Tobacco decapping enzyme (~

40 kDa)

Presentation: Purified Tobacco decapping enzyme is supplied at a concentration range from 0.3-0.8 mg/mL in a buffer containing 50 mM-Tris (pH 8.0), 500 mM NaCl and 10% glycerol.
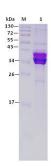
Decapping Reaction Buffer: 1X

10 mM Tris-HCl, pH 7.5
100 mM NaCl
2 mM $MgCl_2$
1 mM DTT
1 mM $MnCl_2$
10x decapping Reaction Buffer: Included

NOTE: The following two components are option based on your applications:
40 units/mL (recombinant RNase inhibitor)
0.1 mM Spermine

SDS-PAGE gel picture:

Purified Tobacco decapping enzyme:

Tobacco decapping enzyme (800 ng) was analyzed by electrophoresis on a 15% SDS- polyacrylamide gel and visualized by staining with Coomassie blue. Protein size markers are indicated on the left. Degradation products of the enzyme are also present.

Suggested condition for used in 5'RACE:
It may not be optimized for other applications.

Reaction temperature/time: 37°C, 30-120 min
Reaction volume: 20-50 μl
RNA substrates: 100ng to 1ug
DeCapping enzymes: 50-500ng (~1-10 pmol)

Contaminating Activity Assay: It is free of detectable RNase activity when incubation of 2ug of SP6 transcript with 50ng of enzyme for 1 hour at 37*C. It is also free of detectable exo and endo nuclease activities.

Storage: Stable for 12 months at -80°C from date of shipment. Please aliquot to avoid repeated freezing and thawing.