

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

## Product Information

**Product Name:** Human DCP2  
**Catalog #:** 86  
**Size:** 10 µg

**Order:** [info@enzymax.net](mailto:info@enzymax.net)  
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**Product:** human DCP2 decapping enzyme

### Product Description:

Human DCP2 is a decapping enzyme of mRNA, which is a critical step in eukaryotic mRNA turnover. This enzyme specifically hydrolyzes methylated capped RNA (m<sup>7</sup>GTP caps) to release m<sup>7</sup>GDP and 5' monophosphorylated RNA.

**Source:** Recombinant human DCP2 was expressed in and purified from *E. coli*.

### Molecular Weight:

Full length hDCP2 (~69 kDa)

### Decapping Reaction Buffer: 1x

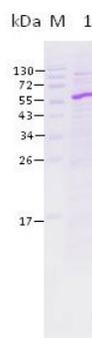
10 mM Tris-HCl, pH 7.5  
100 mM NaCl  
2 mM MgCl<sub>2</sub>  
1 mM DTT  
1 mM MnCl<sub>2</sub>

**10x decapping Reaction Buffer:** Included

**NOTE:** The following two components are optional based on your applications:  
40 units/ml recombinant RNase inhibitor  
0.1 mM Spermine

**Presentation:** Purified hDCP2 is supplied at a concentration range from 0.1-0.5 mg/ml in a buffer containing 50 mM Tris-HCl (pH 8.0), 500 mM NaCl and 10% glycerol.

### SDS-PAGE gel picture:



**Purified human DCP2.** DCP2 (300 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.

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

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

**Contaminating Activity Assay:** It is free of detectable RNase activity when incubation of 2 µg of SP6 transcript with 50 ng 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.