Creative Enzymes®

# HIV-2 Protease, Recombinant

*Cat. No. NATE-1661*

*Lot. No.* (See product label)

## Introduction

***Description*** HIV-2 Protease, an aspartyl protease (retropepsin), is essential for the life-cycle of HIV-2 sub-type virus. It is expressed in the infected cells as a part of Gag-Pol polyprotein from which it is auto-catalytically released after formation of an immature viral particle. The enzyme subsequently cleaves the other parts of viral polyproteins resulting in the maturation of the virus. In HIV-infected patients, the enzyme is subjected to intensive mutagenesis and mutants resistant to applied medicines are produced as a result of the selection pressure. The mutation of HIV protease's active site or inhibition of its activity disrupts HIV's ability to replicate and infect additional cells. HIV-2 has been found to be less pathogenic than HIV-1. The mechanism of HIV-2 is not clearly defined, nor the difference from HIV-1, however the transmission rate is much lower in HIV-2 than HIV-1.

***Synonyms*** HIV-2 retropepsin; HIV-2 Protease (PR2); cd05482

## Product Information

***Source*** E. coli

***Form*** Liquid

***EC Number*** EC 3.4.23.-

***Molecular Weight*** 38.3 kDa (1-99 aa + N-terminal GST and C-terminal Poly-his tags). It runs at ~31.5 kDa during SEC and SDS-PAGE analyses.

***Purity*** > 85%

## Storage and Shipping Information

***Storage*** Store at -80°C

***Stability*** Stable for at least 6 months as supplied. It can be further diluted to 0.5-1 mg/ml with 50 mM Sodium acetate, 100 mM NaCl, 5 mM DTT, 5 mM EDTA, pH 5.0 containing 10% glycerol, and stored at –80°C in aliquots. Do not keep the enzyme at 4°C or -20°C for extended time. Avoid repeated freezing and thawing cycles.