



Rabbit Anti-HIV-1/HIV-2 Protease (N-terminal) Monoclonal Antibody, clone 1696 (CABT- YN1368)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	HIV
Target	HIV-1/HIV-2 Protease
Immunogen	MAb 1696 was prepared by generating a hybridoma cell line, fusing myeloma cells with splenocytes derived from BALB/c mice immunized with HIV-1 PR in the presence of Freund's adjuvant.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	HIV
Clone	1696
Purification	Protein A
Conjugate	unconjugated
Applications	Neut, WB, ELISA
Epitope	Mab 1696 binds to HIV-PR of both HIV-1 and HIV-2. The antibody binds to the N-terminal region of the enzyme, and binding is inhibited by the peptide fragment PQITLWQ which represents residues 1-7. Western blot binding assays show that 1696 recognizes the mature and processed form of the enzyme, but not the precursor which possesses 20 residues upstream from the cleavage site. The N-terminus has a well conserved structure between HIV-1 PR and HIV-2 PR. HIV-PR is a homodimeric apartate protease that specifically cleaves the

viral Gag and Gag/Pol polyprotein precursor. A correlation has been observed between the activity of the protease and the degree of infectivity, and so this protein is a major antiviral target.

Format	Liquid
Size	200 µg, 1 mg
Buffer	PBS with 0.02% Proclin 300.
Preservative	0.02% Proclin 300
Storage	Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

BACKGROUND

Introduction

Integration is mediated by the viral protein integrase (IN), which is incorporated into fledgling viral particles alongside the other viral enzymes reverse transcriptase (RT) and protease (PR). PR initiates virus particle maturation by cleaving viral Gag and Gag-Pol polyprotein precursors into separate viral structural proteins and enzymes, which is required to form the viral core. The core consists of the viral ribonucleoprotein (RNP) complex, which contains two copies of the RNA genome bound by viral nucleocapsid, IN, and RT proteins, encased within a fullerene shell composed of the viral capsid protein (reviewed in Ref. RT converts retroviral RNA into a single molecule of linear DNA containing a copy of the viral long terminal repeat (LTR) at each end (reviewed in Ref. The linear DNA, comprised of U3 and U5 terminal sequences in respective upstream and downstream LTRs, is the substrate for IN-mediated viral DNA insertion into chromosomal DNA.

Keywords

HIV-1 PR; HIV-2 PR; HIV-1 protease; HIV-2 protease; HIV1 PR; HIV2 PR; HIV1 protease; HIV2 protease