Anti-HIV protease antibody ab211627

Overview

- **Product name**: Anti-HIV protease antibody
- **Description**: Rabbit polyclonal to HIV protease
- **Host species**: Rabbit
- **Tested applications**: Suitable for: ELISA, WB, IP, Inhibition Assay
- **Species reactivity**: Reacts with: Other species
- **Immunogen**: Recombinant full length protein corresponding to HIV protease. Full-size functional recombinant HIV1 protease expressed and purified from E. coli. Database link: P03367
- **Positive control**: Purified HIV1 Protease; HIV1 (LAI strain) infected MT4 cell lysate

Properties

- **Form**: Liquid
- **Storage buffer**: Preservative: 0.09% Sodium azide
- **Purity**: Whole antiserum
- **Clonality**: Polyclonal
- **Isotype**: IgG

Applications

Our Abpromise guarantee covers the use of ab211627 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>ELISA</td>
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<td>Use at an assay dependent concentration.</td>
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</table>
The HIV1 core consists of a viral genome housed within a conical viral capsid that is generated during virion maturation. Human immunodeficiency virus type 1 (HIV1) matures after the viral protease processes the Gag and Pol polyproteins at 10 substrate locations. The protease of HIV1 is an aspartic protease and is functional only as a dimer; dimerization results in the formation of a binding cleft in which each of the two catalytic aspartic acids in which each monomer contributes each of the 2 catalytic aspartic acids. Because the protease is active only as a dimer, two of the GagPol precursors must themselves dimerize during virus assembly so that their protease domains can dimerize, become active, and process the precursors. Both the order and kinetics of cleavage as well as the extent of precursor processing appear to be critical steps in the generation of fully infectious, appropriately assembled viral particles. Inhibition of HIV-1 protease represents an important avenue for antiviral therapy. Currently available combination chemotherapy with reverse transcriptase inhibitors (RTIs) and protease inhibitors (PIs) for human immunodeficiency virus type 1 (HIV1) infection and AIDS have been shown to suppress the replication of HIV1 and extend the life expectancy of HIV1 infected individuals.

### Target

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<th>Application</th>
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<td>IP</td>
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<tr>
<td>Inhibition Assay</td>
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<td>Use at an assay dependent concentration. Inhibition of HIV1 protease activity</td>
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### Notes

**Target**

**Relevance**

The HIV1 core consists of a viral genome housed within a conical viral capsid that is generated during virion maturation. Human immunodeficiency virus type 1 (HIV1) matures after the viral protease processes the Gag and Pol polyproteins at 10 substrate locations. The protease of HIV1 is an aspartic protease and is functional only as a dimer; dimerization results in the formation of a binding cleft in which each of the two catalytic aspartic acids in which each monomer contributes each of the 2 catalytic aspartic acids. Because the protease is active only as a dimer, two of the GagPol precursors must themselves dimerize during virus assembly so that their protease domains can dimerize, become active, and process the precursors. Both the order and kinetics of cleavage as well as the extent of precursor processing appear to be critical steps in the generation of fully infectious, appropriately assembled viral particles. Inhibition of HIV-1 protease represents an important avenue for antiviral therapy. Currently available combination chemotherapy with reverse transcriptase inhibitors (RTIs) and protease inhibitors (PIs) for human immunodeficiency virus type 1 (HIV1) infection and AIDS have been shown to suppress the replication of HIV1 and extend the life expectancy of HIV1 infected individuals.

### Images

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</table>

**All lanes**: Anti-HIV protease antibody (ab211627) at 1/2000 dilution

**Lane 1**: Purified HIV1 protease at 0.001 µg
**Lane 2**: MT4 cell lysate
**Lane 3**: HIV1 (LAI strain) infected MT4 cell lysate
ELISA analysis of purified HIV1 protease using ab211627 at dilutions indicated above the graph

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