

CGRP

CGRP is a 37 amino acid peptide synthesized from a calcitonin/CGRP gene complex in the central and peripheral nervous system. Two discrete isoforms (CGRP alpha, CGRP beta) which differ by 3 amino acids have been described. These EIA kits are based on a double antibody sandwich technique that permits measurement of CGRP within the range 0-1000 pg/ml.

CGRP (human) EIA Kit

Sensitivity :

Limit of detection : < 5 pg/ml

Specificity

Rat CGRP- α	120%
Rat CGRP- β	120%
Human CGRP- α	100%
Human CGRP- β	100%
Amylin	<0.01%
Calcitonin	<0.01%
CGRP (8-37)	<0.01%
Substance P	<0.01%

Description	Cat.#	Qty
CGRP (human) EIA Kit	402980	96 Wells

CGRP (rat) EIA Kit

Sensitivity :

Limit of detection : < 5 pg/ml

Specificity

rat CGRP- α	100%
rat CGRP- β	100%
human CGRP- α	83%
human CGRP- β	83%
Amylin	<0.01%
Calcitonin	<0.01%
CGRP (8-37)	<0.01%
Substance P	<0.01%

Description	Cat.#	Qty
CGRP (rat) EIA Kit	HF6100	96 wells

EIA infectious diseases detection kits

Following infectious disease detection kits are supplied with a positive and negative control coated microtiter plate. The format is 96 well kit.

Description	Cat.#	Qty
CMV (IgG) ELISA Kit	AP8360	96 wells
CMV (IgM) ELISA Kit	AQ0300	96 wells
EBV (IgG) ELISA Kit	AQ0310	96 wells
EBV (IgM) ELISA Kit	AQ1000	96 wells
H. Pylori (IgG) ELISA Kit	AQ7380	96 wells
Herpes 1 (IgG) ELISA Kit	AP8370	96 wells
Herpes 1 (IgM) ELISA Kit	AQ0320	96 wells
Herpes 2 (IgG) ELISA Kit	AP8380	96 wells
Herpes 2 (IgM) ELISA Kit	AQ0330	96 wells
HIV-1 p24 Antigen ELISA Kit	AT3430	96 wells
HIV-1 p24 Extended Range Kit	AP7320	96 wells
HTLV-III p19 Antigen ELISA Kit	AT4040	96 wells
Measles (IgG) ELISA Kit	AP8390	96 wells
Measles (IgM) ELISA Kit	AQ0340	96 wells
Rubella (IgG) ELISA Kit	AP8400	96 wells
Rubella (IgM) ELISA Kit	AQ0350	96 wells
SIV p27 Antigen ELISA	AT6130	96 wells
Toxoplasmosis (IgG) ELISA Kit	AP8410	96 wells
Toxoplasmosis (IgM) ELISA Kit	AQ0360	96 wells

See also Antibody Research Area #15 (Infectious agents) page A13

Please inquire at interbiotech@interchim.com for any information.

Prions Kit

Prion Protein EIA Kit

Cellular prion protein (PrP_c) is a cell surface glycoprotein expressed in brain, spinal cord, and several peripheral tissues. This enzyme immunoassay (EIA) is based on a double-antibody sandwich technique and has been validated for the detection of native PrP_c in brain extracts. It can also be used to detect PrP_c extracted from other tissues, as well as denatured PrP and recombinant PrP. The antibodies used in this kit were raised against scrapie associated fibrils (SAF) hamster brain and crossreact with PrP from most of mammalian species including mouse, human, sheep, and cattle. Each kit contains tracer, positive control, Ellman's reagent, EIA buffer, wash buffer, Tween 20, 96 well plate pre-coated with anti-prion protein mouse monoclonal antibody, well cover sheets, and complete instructions.

Description	Cat.#	Qty
Prion Protein EIA Kit	HF6080	1 kit (96 wells)

HIV and HCV virus assays

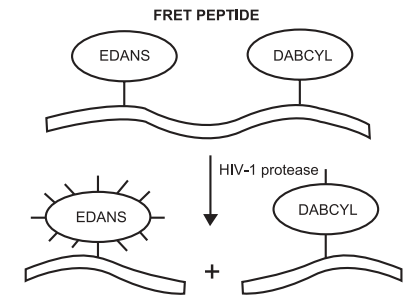
HIV Protease Assays "Fluorimetric"

The 10~12 kD aspartic protease of Human Immunodeficiency Virus-1 (HIV-1) is required for the post-translational cleavage of the precursor polyproteins, Pr^{gag} and Pr^{gag-pol} 1. Since these cleavages are essential for the maturation of HIV infectious particles, this protease has become one of the key targets for developing anti-AIDS drugs.

The EnzoLyte™ HIV-1 protease Assays provides a convenient tool for high throughput screening of HIV-1 protease inhibitors and for continuous quantification of HIV-1 protease activity. They use a fluorescence resonance energy transfer (FRET) peptide, either derivatized with EDANS/DABCYL or HiLyte Fluor™488/QXL™520.

The peptide sequence is derived from the native p17/p24 cleavage site on Pr^{gag} for HIV-1 protease.

In the FRET peptide, the fluorescence of a fluorophore is abolished by a quencher. Upon cleavage into two separate fragments by the HIV-1 protease at the Tyr-Pro bond, the fluorescence of the fluor is recovered, and can be monitored at following excitation/emission wave lengths :



Schema 1. Proteolytic cleavage of EDANS/DABCYL FRET peptide by HIV-1 protease

Selection guide

FRET peptide substrate	Excitation/emission wavelengths	Features
EDANS/DABCYL	340 nm/490 nm	Standard FRET pair
HiLyte	490 nm/520 nm	Excellent fluorescence quantum yield and longer excitation and emission wavelength .
Fluor™488/QXL™520		Less interference from autofluorescence of cell components and test compounds that comes with shorter emission wavelength fluorophores and non-FRET substrates.

Convenient Format : Complete kit including all the assay components.

Optimized Performance : Optimal conditions for the detection of HIV-1 protease activity.

High Speed : Minimal hands-on time.

Assured Reliability : Detailed protocol and references are provided.

Description	Cat.#	Qty
EnzoLyte™ 490 HIV Protease Assay Kit (EDANS/DABCYL FRET)	HT1260	500 tests or 1250 tests
EnzoLyte™ 520 HIV Protease Assay Kit (FAM/QXL520 FRET)	BN3330	500 tests or 1250 tests

Literature

Seelmeier S., et al, Proc.Natl.Acad.Sci.U.S.A 85, 6612 (1988).

Gehring H. et al., J.Virol.Methods 109, 143 (2003).

Schneider J. et al, Cell 54, 363 (1988).

Seelmeier S., et al, Proc.Natl.Acad.Sci.U.S.A 85, 6612 (1988)

Each kit contains :
 Optimized FRET peptide substrate
 Assay buffer
 HIV protease inhibitor
 Fluorescence reference standard for calibration
 Detailed protocol

HCV Protease Assays "Fluorimetric"

The NS3/4A protease of Hepatitis C Virus (HCV) is required for the cleavage of viral non-structural polyprotein at the NS3-NS4A, NS4A-NS4B, NS4B-NS5A, and NS5A-NS5B sites. Since these cleavages are essential for the maturation of the viral proteins, this protease has become one of the key targets for developing anti-HCV drugs.

The EnzoLyte™ HCV Protease Assays provide a convenient assay for high throughput screening of HCV NS3/4A protease inhibitors and for continuous quantification of HCV NS3/4A protease activity using a fluorescence resonance energy transfer (FRET) peptide.

- ◆ The sequence of this FRET peptide is derived from the cleavage site of NS4A/NS4B. The cysteine on the natural cleavage site is replaced with aminobutyric acid (Abu) and the scissile amide bond with an ester bond. These modifications improved K_{cat}/K_m values by more than 100 fold and enabled the detection of the activity of NS3/4A protease at subnanomolar concentrations.
- ◆ The FRET tandems are available. The fluorescence of the fluorophore is abolished by a quencher. Upon cleavage into two separate fragments by HCV NS3/4A protease at the Abu-Ala bond, the fluorescence of the fluorophore is recovered, and can be monitored at following excitation/emission wave-lengths :

Selection guide

FRET peptide substrate	Excitation/emission wave lengths	Features
EDANS/DABCYL	340 nm/490 nm	Standard FRET pair
5-FAM/QXL™520	490 nm/520 nm	Less interference from autofluorescence of cell components and test compounds that comes with shorter emission wavelength fluorophores and non-FRET substrates. 10 fold more sensitive than EDANS/DABCYL FRET substrate and can detect HCV NS3/4A protease activity at 0.1 pmole.
HiLyte Fluor™TR/QXL™610	591 nm/622 nm	Near red wavelength signal avoids the interference from most test compounds and is therefore ideal for high throughput screening of HCV NS3/4A protease inhibitors.

Each kit contains :
 Optimized FRET peptide substrate
 Assay buffer
 HCV protease inhibitor
 Fluorescence reference standard for calibration
 Detailed protocol

The assays are performed in a convenient 96-well or 384-well microplate format.

Related products : Over 1000 HIV/SIV peptides are available.
 See Antigens table p.A.256.

Description

Description	Cat.#	Qty
EnzoLyte™ 490 HCV Protease Assay Kit	HT0830	500 tests
EnzoLyte™ 520 HCV Protease Assay Kit	BT2530	100 tests
EnzoLyte™ 620 HCV Protease Assay Kit	BT2540	100 tests

Literature

Sali D. L., et al., *Biochemistry* 37, 3392-3401 (1998).
 Steinkuhler C., et al., *Biochemistry* 37, 8899-8905 (1998).
 Gallinari P., et al., *J. Virol.* 72, 6758-6769 (1998).