

Product datasheet

DNMT Activity Assay Kit (Colorimetric) ab113467

★★★★☆ 2 Abreviews 9 References 2 Images

Overview

Product name	DNMT Activity Assay Kit (Colorimetric)
Detection method	Colorimetric
Assay type	Enzyme activity (quantitative)
Assay time	3h 45m
Species reactivity	Reacts with: Mouse, Rat, Human, Drosophila melanogaster, Plants Predicted to work with: Mammals, Fungi

Product overview

DNMT Activity Quantification Kit (Colorimetric) ab113467 allows the user to colorimetrically measure DNA methyltransferase activity or inhibition at extremely fast speed on a 96-strip well microplate.

The kit is ready-to-use and provides all the essential components needed to carry out a successful DNMT activity/inhibition experiment without the need for radioactivity or any special equipment.

In the DNMT assay protocol, DNMT enzymes in a sample transfer methyl groups from Adomet to a DNMT DNA substrate coated onto microplate wells. The methylated DNA is bound with a 5-methylcytosine antibody. A secondary antibody binds the 5-methylcytosine antibody, and the enzyme-conjugated secondary antibody is detected using a chromogenic enzyme substrate.

DNMT assay protocol summary:

- add samples, positive controls, and samples with inhibitor to wells
- incubate for 90-120 min, and wash wells three times with wash buffer
- add capture antibody, incubate for 60 min, and wash wells
- add detection antibody, incubate for 30 min, and wash wells
- add enhancer solution, incubate for 30 min, and wash wells
- add developer solution, incubate for 1-10 min
- add stop solution and analyze with a microplate reader

Notes DNMT (DNA methylases) is a family of enzymes responsible for the addition of methyl groups on the cytosine ring at the 5' position of a CpG dinucleotide. The DNMT family is required for the establishment and maintenance of DNA methylation patterns.

Platform Microplate reader

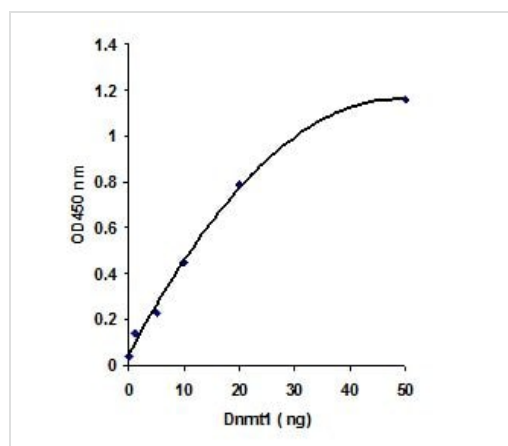
Properties

Storage instructions

Please refer to protocols.

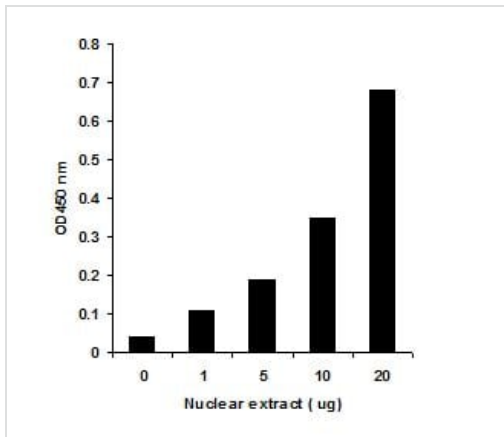
Components	48 tests	96 tests
10X Wash Buffer	1 x 14ml	1 x 28ml
8-Well Assay Strips (with Frame)	6 units	12 units
Adhesive Covering Film	1 unit	1 unit
Adomet, 50X	1 x 60µl	1 x 120µl
Capture Antibody, 1000 µg/mL	1 x 5µl	1 x 10µl
Detection Antibody, 400 µg/mL	1 x 6µl	1 x 12µl
Developer Solution	1 x 5ml	1 x 10ml
DNMT Assay Buffer	1 x 4ml	1 x 8ml
DNMT Enzyme Control, 50 µg/mL	1 x 6µl	1 x 12µl
Enhancer Solution	1 x 6µl	1 x 12µl
Stop Solution	1 x 5ml	1 x 10ml

Images



Demonstration of high sensitivity and specificity of the DNMT activity/inhibition assay achieved by using recombinant DNMT1 with ab113467.

Functional Studies - DNMT Activity Quantification
Kit (Colorimetric) (ab113467)



Demonstration of high sensitivity and specificity of the DNMT activity assay achieved by using nuclear extracts with ab113467. Nuclear extracts were prepared from MCF-7 cells using ab113474.

Functional Studies - DNMT Activity Quantification
Kit (Colorimetric) (ab113467)

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