



Caspase-9 Activity Assay Kit

Catalog number: AR4008

This package insert must be read in its entirety before using this product.

For research use only. Not for use in diagnostic procedures.

Catalog Number: AR4008, Storage:

Introduction

Caspase-9 is cysteine protease and an initiator caspase that cleaves procaspase 3 and procaspase 7 to propagate the apoptotic cascade. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme.

Our Caspase-9 Assay Kit, Colorimetric provides a simple and convenient method for assaying the activity of caspases 9, which is based on the hydrolysis of the labeled substrate Ac-LEHD-pNA (N-Acetyl-Leu-Glu-His-Asp-p-nitroanilide) by Caspase-9, releasing the pNA (p-nitroaniline) moiety from the substrate. The released pNA has the max absorbance at 405 nm ($\epsilon_{405\text{nm}} = 10.5$) and its concentration is calculated by measuring the absorbance values at 405 nm or from a standard calibration curve prepared using the pNA Dye Standard, using a microplate reader or spectrophotometer.

The assay can be performed in 100 μl volume in a 96 well plate using an ELISA plate reader or in 1 ml volume and measured in a spectrophotometer, using quartz cuvettes, since plastic cuvettes attenuate the absorption at 405 nm. Comparison of the absorbance of the released pNA from an apoptotic sample with an uninduced control allows determination of the fold increase in Caspase-9 activity.

Overview

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SKU/Catalog Number	AR4008
Description	Our Caspase-9 Assay Kit, Colorimetric provides a simple and convenient method for assaying the activity of caspases 9, which is based on the hydrolysis of the labeled substrate Ac-LEHD-pNA (N-Acetyl-Leu-Glu-His-Asp-p-nitroanilide) by Caspase-9, releasing the pNA (p-nitroaniline) moiety from the substrate. The released pNA has the max absorbance at 405 nm ($\epsilon_{405\text{nm}} = 10.5$) and its concentration is calculated by measuring the absorbance values at 405 nm or from a standard calibration curve prepared using the pNA Dye Standard, using a microplate reader or spectrophotometer.
Cite This Product	Caspase-9 Activity Assay Kit (Boster Biological Technology, Pleasanton CA, USA, Catalog # AR4008)

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