

Product datasheet

Caspase 9 Assay Kit (Colorimetric) ab65608

[64 References](#) [1 Image](#)

Overview

Product name	Caspase 9 Assay Kit (Colorimetric)
Detection method	Colorimetric
Sample type	Tissue Extracts, Cell Lysate
Assay type	Enzyme activity
Assay time	2h 00m
Species reactivity	Reacts with: Mammals
Product overview	Caspase 9 Assay Kit (Colorimetric) ab65608 provides a simple and convenient means for assaying the activity of caspases that recognize the sequence LEHD.

The caspase 9 assay is based on spectrophotometric detection of the chromophore p-nitroanilide (p-NA) after cleavage from the labeled substrate LEHD-p-NA. The p-NA light emission can be quantified using a spectrophotometer or a microtiter plate reader at 400- or 405 nm.

Notes This product is manufactured by BioVision, an Abcam company and was previously called K119 Caspase-9 Colorimetric Assay Kit. K119-100 is the same size as the 100 test size of ab65608. Activation of ICE-family proteases/caspases initiates apoptosis in mammalian cells.

Other caspase and apoptosis assays

Review the full set of [caspase assays](#), or the [apoptosis assay and apoptosis marker guide](#).

Platform Microplate reader

Properties

Storage instructions Store at -20°C. Please refer to protocols.

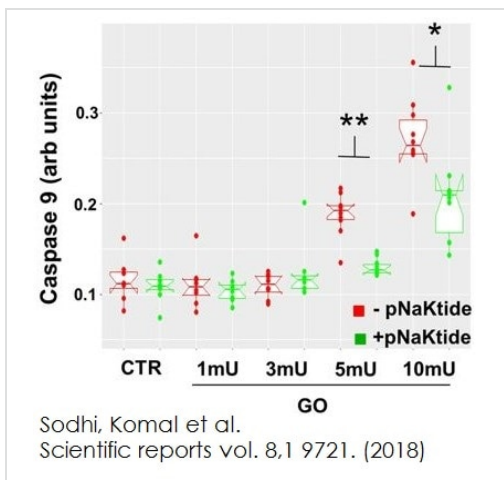
Components	100 tests
2X Reaction Buffer I	4 x 2ml
Dilution Buffer II	1 x 100ml
DTT I	1 x 400µl

Components	100 tests
LEHD-pNA	1 x 500µl
Lysis Buffer IV	1 x 100ml

Relevance

Caspases are cysteine proteases, expressed as inactive precursors, that mediate apoptosis by proteolysis of specific substrates. Caspases have the ability to cleave after aspartic acid residues. There are two classes of caspases involved in apoptosis; initiators (activation by receptor cluster) and effectors (activation by mitochondrial permeability transition). Proapoptotic signals autocatalytically activate initiator caspases, such as Caspase 8 and Caspase 9. Activated initiator caspases then process effector caspases, such as Caspase 3 and Caspase 7, which in turn cause cell collapse. Caspase 9 (also known as ICE like apoptotic protease 6 (ICE LAP6), apoptotic protease Mch6, and apoptotic protease activating factor 3 (Apaf3)) is a member of the peptidase family C14 that contains a CARD domain. It is active as a heterotetramer and has been reported to have two isoforms. ProCaspase 9 is approximately 47 kD. It is present in the cytosol and, upon activation, translocates to the mitochondria. Caspase 9 is involved in the caspase activation cascade responsible for apoptosis execution and cleaves/activates Caspase 3 and Caspase 6. It becomes activated when recruited to the Apaf1/cytochrome c complex.

Images



Caspase-9 activity measured by ab65608. N = 16/group, □ p < 0.05, □□ p < 0.01 vs. corresponding GO concentration groups without pNaKtide.

Functional Studies - Caspase 9 Assay Kit

(Colorimetric) (ab65608)

Sodhi, Komal et al., Scientific reports?vol. 8,1 9721., Fig 5, doi:10.1038/s41598-018-26768-9

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