

CHIA Fluorometric Assay Kit

Product Information

Cat.No.

Kit-0213

Product Overview

CHIA Assay Kit (Fluorometric) is used for the quantitative measurement of acidic mammalian chitinase (AMCase) activity in a culture supernatant of stimulated pulmonary epithelial cells, several tissue extracts and other biological samples.

Description

The glycosyl hydrolase family is quite large, with over 100 families. Acidic mammalian chitinase (AMCase) and chitotriosidase-1 are enzymatically active true chitinases in a member of the glycosyl hydrolase-18 family, identified by EC 3.2.1.14. In mammals, only these two enzymes cleave N-acetyl-beta-D-glucosamine (1->4)-beta linkages in chitodextrins and chitin, the second most abundant biopolymer that can be found in the cell walls of fungi, micro-filarial sheaths of helminths, and exoskeletons of insects and crustaceans. Other members included in this family are chitinase-like molecules, e.g. YKL-40/Chitinase-3-like-1 and YKL-39/chitinase-3-like-2, that are thought to lack the ability to hydrolyze the chitin linkages, but retain chitin-binding activity and act more like connective tissue proteins, and immediate early gene products.

Applications

CHIA Assay Kit (Fluorometric) is used for the quantitative measurement of acidic mammalian chitinase (AMCase) activity in a culture supernatant of stimulated pulmonary epithelial cells, several tissue extracts and other biological samples.

Usage

For research use only (RUO)

Storage

- Upon receipt store "Recombinant AMCase" at -70°C and all other components below -20°C. • Don't expose reagents to excessive light.

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Kit Components

10X AMCase Assay Buffer (pH 2.0) 1.0 mL x 210X Chitinase Assay Buffer (pH 4.0) 1.0 mL x 210X Fluoro-Substrate (200 μ M 4-MU-chitotrioside*) 1.0 mL x 110X Recombinant AMCase ** 1.0 mL x 1Enzyme Dilution Buffer 1.0 mL x 24-Methylumbellifone Standard (100 μ M) 200 μ L x 1 * 4-Methylumbelliferyl-β-D-N,N",N"-triacetylchitotrioside** Recombinant human AMCase expressed in HEK293 cells.

Detection method Fluorometric

Compatible Sample Types

Culture Supernatant of Stimulated Pulmonary Epithelial Cell, Several Tissue Extract, Other Biological Sample