

## Amylase Assay Kit

### Product Information

**Cat.No.**

Kit-0089

**Product Overview**

Amylase Assay Kit is used for detecting amylase.

**Description**

Amylases are enzymes that break starch down to sugar molecules.  $\alpha$ -amylase is the major form of amylase found in humans and other mammals as well as an enzyme present in seeds, or in fungi (baker's yeast for instance).  $\alpha$ -amylase is a calcium metalloenzyme, completely unable to function in the absence of calcium. In human physiology, both the salivary and pancreatic amylases are major digestive enzymes. Increased enzyme levels in humans are associated with salivary trauma; mumps due to inflammation of the salivary glands, pancreatitis and renal failure. A simple, direct and automation-ready procedure for measuring  $\alpha$ -amylase activity is, therefore, very desirable. The Amylase Assay Kit uses ethylidene-pNP-G7 as the substrate. Once the substrate has been specifically cleaved by  $\alpha$ -amylase, the smaller fragments produced can be acted upon by  $\alpha$ -glucosidase, which causes the ultimate release of the chromophore that can then be measured at 405 nm. The assay can detect  $\alpha$ -amylase content as low as 0.2 mU.

**Target Species**

Mammals

**Usage**

For research use only (RUO)

**Storage**

Store kit at  $-20^{\circ}\text{C}$ . Warm the assay buffer to room temperature before use. Briefly centrifuge vials before opening. Read the entire protocol before performing the assay. Keep samples and amylase positive control on ice during the assay. Amylase Positive Control: Dissolve into 50  $\mu\text{l}$  Assay Buffer, and store at  $-20^{\circ}\text{C}$ .

## Amylase Assay Kit

### Kit Components

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Amylase Assay Buffer 55 ml Amylase Substrate Mix 5 ml Amylase Positive Control (lyophilized) 1 vial  
Nitrophenol Standard (2 mM) 150 ul

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**Detection method** Colorimetric

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### Compatible Sample Types

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Biological Fluid, Cell Culture Supernatant, Fermentation Medium, Food Sample, Plasma, Serum, Tissue Culture Supernatant, Urine

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