

# Pancreatic Marker Antibody Sampler Kit



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Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
$\alpha$ -Amylase (D55H10) XP <sup>®</sup> Rabbit mAb	3796	40 $\mu$ l	58 kDa	Rabbit IgG
CD31 (PECAM-1) (89C2) Mouse mAb	3528	40 $\mu$ l	130 kDa	Mouse IgG1
Keratin 17/19 (D32D9) XP <sup>®</sup> Rabbit mAb	3984	40 $\mu$ l	48/41 kDa	Rabbit IgG
Pdx1 (D59H3) XP <sup>®</sup> Rabbit mAb	5679	40 $\mu$ l	42 kDa	Rabbit IgG
PLA2G1B (D1T4C) Rabbit mAb	14635	40 $\mu$ l	16 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 $\mu$ l		Goat
Anti-mouse IgG, HRP-linked Antibody	7076	100 $\mu$ l		Horse

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## Description

The Pancreatic Marker Antibody Sampler Kit provides an economical means to evaluate relevant pancreatic proteins. This kit contains enough primary antibody to perform four western blots per primary.

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at  $-20^{\circ}\text{C}$ . Do not aliquot the antibody.

## Background

The Pancreatic Marker Antibody Sampler Kit contains a variety of antibodies directed against established pancreatic proteins.  $\alpha$ -Amylase catalyzes the cleavage of 1, 4- $\alpha$ -D-glucosidic bonds in oligosaccharides and polysaccharides (1). The enzyme is normally produced and secreted in salivary glands (salivary  $\alpha$ -amylase or AMY1) and pancreas (pancreatic  $\alpha$ -amylase or AMY2A) (1). CD31 (Platelet Endothelial Cell Adhesion Molecule-1: PECAM-1), a member of the Ig superfamily of cell adhesion molecules, is expressed by circulating platelets, monocytes, neutrophils, some T cells, and endothelial cells, and modulates cell adhesion, endothelial cell migration, and angiogenesis (2). Keratins (cytokeratins) are intermediate filament proteins that are mainly expressed in epithelial cells. Keratin heterodimers composed of an acidic keratin (or type I keratin, keratins 9 to 23) and a basic keratin (or type II keratin, keratins 1 to 8) assemble to form filaments (3,4). The pancreatic duodenal homeobox gene-1 (Pdx1) is a transcription factor that contributes to pancreas development, pancreatic  $\beta$ -cell differentiation, and mature  $\beta$ -cell function (5,6). It plays an essential role in the commitment of endoderm to a pancreatic and later  $\beta$ -cell phenotype (6,7). In the mature pancreas, Pdx1 expression is more restricted to the pancreatic  $\beta$ -cells (7), where it promotes the expression of genes important for  $\beta$ -cell functions, such as insulin, glucokinase, and Glut2 (8-10). Phospholipase A2 (PLA2) is a superfamily of enzymes that hydrolyze glycerol-3-phosphocholines and release fatty acids and lysophospholipids (11). PLA2G1B is a member of this superfamily in the 1B group that is expressed most highly in the pancreatic acinar cells (12). Evidence suggests that PLA2G1B plays a role in the absorption and storage of extra energy as fats are metabolized (11,12).

## Background References

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