



## DPPIV drug discovery Kit

### Product Information

#### Cat.No.

Kit-0316

#### Product Overview

The DPPIV Drug Discovery Kit is a complete assay system designed to screen DPPIV inhibitors, providing enough material to perform at least 96 assays.

#### Size

96 wells

#### Description

DPPIV (DPP4, CD26) is a member of the class of proteases known as prolyl peptidases, which cleave proteins after proline residues and is thought to play roles in diabetes, cancer, and autoimmune diseases, making it a target for drug discovery. The kit contains both a chromogenic substrate (H-Gly-Pro-pNA;  $K_m=114 \mu\text{M}$ ) and a fluorogenic substrate (H-Gly-Pro-AMC;  $K_m=50 \mu\text{M}$ ). Cleavage of the p-nitroaniline (pNA) from the colorimetric substrate increases absorbance at 405 nm. The fluorimetric assay is based on the cleavage of 7-amino-4-methylcoumarin (AMC) moiety from the C-terminus of the peptide substrate, which increases its fluorescence intensity at 460 nm. The kit is useful to screen inhibitors of DPPIV, a potential therapeutic target. A DPPIV inhibitor, P32/98 ( $K_i=130 \text{ nM}$ ), is included for use as a control. Other DPP enzymes are available for specificity profiling.

#### Applications

Colorimetric detection, Fluorescence microscopy, HTS

#### Storage

-80°C

#### Kit Components

DPPIV enzyme (human, recombinant), pNA substrate, Calibration standard (p-nitroaniline), AMC substrate, Calibration standard (7-Amino-4-methylcoumarin), Inhibitor, Assay Buffer, 1/2-volume clear microplate