

Native Human Dipeptidyl Peptidase-4

Cat. No. NATE-0962

Lot. No. (See product label)

Introduction

Description

Native DPPIV is a ubiquitous type II transmembrane glycoprotein and a serine protease of the S9 prolyl-oligopeptidase family. In vivo, it is synthesized with a signal peptide, which functions as the membrane anchoring domain. There is an 88% sequence homology between the human and porcine kidney enzymes. Both exist as homodimers with a subunit molecular weight of ~30 kDa. The high mannose 100 kDa DPPIV precursor is processed in the Golgi to yield a 124 kDa heavily N- and O-linked mature glycoprotein. It is then sorted to the apical membrane through the concerted action of both N- and O-linked glycans and its association with lipid microdomains. The porcine enzyme contains 18.3% carbohydrates, which the glycan composition is 0.9% fucose, 3.4% mannose, 5.1% galactose, 8.2% glucosamine, and 0.7% sialic acid. DPPIV is highly expressed on endothelial cells, epithelial cells, and lymphocytes. It is also present in plasma in its soluble form.

Applications

Diagnostic Controls, Calibrators & Standards; Clinical Chemistry; Testing/Assay Validation; Life Science; ELISA; Blotting; Manufacturing

Synonyms

Adenosine Deaminase Complexing Protein 2; CD26; DPP4

Product Information

Species

Human

Source

Human Placenta

Form

Liquid

EC Number

EC 3.4.14.5

Purity

> 95% (SDS-PAGE)

Unit Definition

One unit is defined as the amount of enzyme that hydrolyzes one umole of H-Gly-Pro-pNA per minute at 25°C, pH 7.8

Storage and Shipping Information

Storage

Store at -20°C

Stability

2 years