

## Dipeptidyl Peptidase IV (DPP-IV), food grade

Cat. No. NATC-205

Lot. No. (See product label)

### Introduction

#### Description

Dipeptidyl polypeptidase IV (DPPIV), also known as adenosine deaminase complex protein 2 or CD26, is an antigenic enzyme expressed on the surface of most cell types and is associated with immunomodulation, signaling and apoptosis. It is an innate membrane glycoprotein and serine exopeptidase. DPPIV plays an important role in glucose metabolism and is responsible for the degradation of enteric insulin such as GLP-1. In addition, it inhibits the development of cancer and tumors. It plays a pathogenic role in the development of fibrosis in many organs such as the liver and kidney. DPPIV plays an important role in tumor biology and is a potent marker for a variety of cancers, with levels elevated on the cell surface of some tumors or in serum, and decreased in others. Middle East Respiratory Syndrome Coronavirus, a new SARS-related coronavirus, has been found to bind DPPIV. DPPIVs are found on the cell surface of airways (e.g., lungs) and kidneys, and scientists have used them to their advantage to block viral entry into cells.

#### Applications

Dipeptidyl polypeptidase IV (DPP-IV) is an important protein hydrolyzing enzyme with multiple applications: Treatment of diabetes: DPP-IV inhibitors such as sitagliptin and riligliptin prolong the action of GLP-1 to help control blood glucose. Immunomodulation: DPP-IV plays a role in T cell activation and inhibitors can be used to modulate autoimmune diseases. Cancer research: DPP-IV is aberrantly expressed in certain cancers and is a potential therapeutic target. Obesity and Metabolic Syndrome: By potentiating the effects of GLP-1, DPP-IV inhibitors can be used for weight management and metabolic health. Neurological disorders: DPP-IV inhibitors have potential in Alzheimer's disease and Parkinson's disease to reduce neuroinflammation and protect neurons.

### Product Information

<b>Source</b>	Aspergillus oryzae
<b>Appearance</b>	Light-yellow Powder
<b>Form</b>	Powder
<b>Specific Activity</b>	20000 DPP IV-PANU/g

### Storage and Shipping Information

<b>Storage</b>	Store in a cool, ventilated and dry place, avoid direct sunlight.
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