

#### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Porcine Enteropeptidase/Enterokinase

Catalog No.	Source
§ 228-11224	Porcine
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# **Synonyms**

Enteropeptidase, EC 3.4.21.9, Enterokinase, Serine protease 7, ENTK, MGC133046.

#### Introduction

Enteropeptidase or enterokinase is an enzyme involved in human digestion. It is produced by cells in the duodenum wall, and is secreted from duodenum's glands, the crypts of Lieberkühn, whenever ingested food enters the duodenum from the stomach. Enteropeptidase has the critical job of turning trypsinogen (a zymogen) to trypsin, indirectly activating a number of pancreatic digestive enzymes. Enteropeptidase is a serine protease enzyme(EC3.4.21.9). Enteropeptidase is a part of the Chymotrypsin-clan of serine proteases, and is structurally similar to these proteins.

# Description

Porcine enteropeptidase is a specific protease which cleaves after the lysine at its recognition site: Asp-Asp-Asp-Asp-Lys. Enterokinase will not cleave a site followed by proline. Theoretical Mw is 21,880 Dalton, the apparent Mw on SDS-PAGE is about 40 kDa.

If a fusion tag is located in the N-terminus with an enterokinase site, enterokinase will be able to remove the fusion tag and to generate the protein exactly as you need without adding any unwanted residues. RayBiotech's enterokinase is a highly purified enterokinase from porcine. The enzyme has been extensively purified and tested to ensure that there are no other contaminating proteases.

# Physical Appearance

Sterile liquid

#### **Formulation**

2 IU/µl, 50mM Tris-HCl, pH 8.0, 0.5M NaCl and 50% glycerol.

# Stability

One year when stored at -20°C, one week at room temperature.

#### Unit definition

One unit is defined as the amount of enzyme needed to cleave 50 ug of fusion protein in 16 hours to 95% completion at 25°C in a buffer containing 25mM Tris-HCl, pH 7.6, 50mM NaCl, and 2mM CaCl<sub>2</sub>.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.