

# Native cow Trypsin protein ab229834

### Description

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<b>Product name</b>	Native cow Trypsin protein
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Expression system</b>	Native
<b>Accession</b>	<b><u>P00760</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Native
<b>Species</b>	Cow

### Specifications

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Our **Abpromise guarantee** covers the use of **ab229834** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Paste / Gel
<b>Additional notes</b>	<p>Immobilized Trypsin Digestion Protocol</p> <ol style="list-style-type: none"><li>1. Make a digestion buffer consisting of 0.1M Ammonium Bicarbonate, pH 8.0 (or other suitable buffer such as 0.1M Triethylamine Acetate, pH 8.0).</li><li>2. Dissolve 1 mg of your protein sample in 0.5ml digestion buffer.</li><li>3. Wash 0.15-0.3ml of immobilized trypsin with 3x0.5ml of digestion buffer. Separate the gel from the buffer after each wash by centrifugation or by column. Discard buffer after each wash.</li><li>4. Resuspend the washed immobilized trypsin gel in ~0.2ml of digestion buffer then add the resin to your protein sample.</li><li>5. Incubate mixture in a shaking water bath for 2-18 hours at 37C with rapid agitation.</li><li>6. Separate the immobilized trypsin gel from the digestion mixture as noted in step 3. Retain supernatant as your trypsin-digested protein sample.</li></ol> <p>Note: Optimization of immobilized trypsin protocol is required for specific applications. Recommended reaction conditions are pH 7.5 to 9.0 at 37C. The reaction rate will be increased by increasing the enzyme to protein substrate ratio and incubation temperature. For example, a typical digestion of 4 hours to overnight can be achieved using a ratio of 1:25 enzyme to protein substrate, while it is recommended to use 1:10 enzyme to protein substrate for accelerated</p>

trypsin digestion (30-60 minutes).

## Preparation and Storage

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### Stability and Storage

Shipped at 4°C. Store at +4°C. Do Not Freeze.

Preservative: 0.02% Sodium azide

Constituent: 50% Glycerol (glycerin, glycerine)

10 ml of 1:1 slurry

This product is an active protein and may elicit a biological response in vivo, handle with caution.

## General Info

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### Function

Has activity against the synthetic substrates Boc-Phe-Ser-Arg-Mec, Boc-Leu-Thr-Arg-Mec, Boc-Gln-Ala-Arg-Mec and Boc-Val-Pro-Arg-Mec. The single-chain form is more active than the two-chain form against all of these substrates.

### Involvement in disease

Defects in PRSS1 are a cause of hereditary pancreatitis (HPC) [MIM:167800]; also known as chronic pancreatitis (CP). HPC is an autosomal dominant disease characterized by the presence of calculi in pancreatic ducts. It causes severe abdominal pain attacks.

### Sequence similarities

Belongs to the peptidase S1 family.

Contains 1 peptidase S1 domain.

### Post-translational modifications

Occurs in a single-chain form and a two-chain form, produced by proteolytic cleavage after Arg-122.

### Cellular localization

Secreted > extracellular space.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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