

# Carboxypeptidase Y

20212

1968.1

**Number**

20212

**Description****Carboxypeptidase Y**, 50 units, 1 mg

Unit definition: One unit hydrolyzes one micromole of benzyl-oxycarbonyl-L-phenylalanyl-L-leucine per minute at 25°C, pH 6.5

**Storage:** Upon receipt store at -20°C. Product shipped at ambient temperature.

**Introduction**

Carboxypeptidase Y is a glycoprotein exopeptidase of the serine class. The enzyme has broad specificity and releases every amino acid, including proline, from the carboxyl terminus of proteins and peptides. Also known as Proteinase C, the enzyme has similar properties to Carboxypeptidase A but hydrolyzes leucine more rapidly and phenylalanine more slowly. Carboxypeptidase Y is active in urea and sodium dodecyl sulfate (SDS) solutions and, therefore, it can act using denaturing conditions when sequencing polypeptides.

**General Procedure for Protein or Peptide Digestion****Materials Required**

- Reaction Buffer: 0.1 M pyridine acetate, pH 5.5 (or PBS) for peptides or 0.1 M sodium acetate for proteins
- Protein or peptide sample dialyzed or desalted using the Reaction Buffer

**Method**

1. Add Carboxypeptidase Y to the sample (1:100 w/w for peptides and 1:200 w/w for proteins).
2. Incubate at 35°C for peptides or 37°C for proteins.
3. To monitor digestion, remove portions of the sample at regular intervals for analysis.
4. Continue incubation for 2 hours for peptides or 50 minutes for proteins.

**Related Thermo Scientific Products**

20236	<b>Immobilized Carboxypeptidase Y</b> , 25 units
20214	<b>Aminopeptidase M</b> , 20 units
20238	<b>Immobilized Aminopeptidase M</b> , 2 ml
20195	<b><i>Staphylococcus aureus</i> V-8 Protease</b> , 5 mg
20151	<b><i>Staphylococcus aureus</i> V-8 Protease Kit</b>
20199	<b>Submaxillary Arg-C Protease</b> , 250 units
20230	<b>Immobilized Trypsin, TPCK Treated</b> , 2 ml
20233	<b>TPCK Trypsin</b> , 50 mg

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## References

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