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A Geno Technology, Inc. (USA) brand name

SG-Carboxypeptidase B (Recombinant)[™] (Cat. #786-1249, 786-1250)



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INTRODUCTION

SG-Carboxypeptidase B (Recombinant)[™] is the rat carboxypeptidase B expressed in *E. coli*. It specifically hydrolyses basic amino acids including lysine, arginine and histidine from the C-terminal end of polypeptides. It is 34.5 kDa protein with the pH optimum of 8.0 and pI is 6.0. Carboxypeptidase B is competitively inhibited by arginine and lysine and metal chelating agents such as EDTA.

It is used in sequencing protein and peptides. Other applications are related to its origin and function such as use in studies involving new potential biomarkers for acute pancreatitis.

ITEM(S) SUPPLIED

Cat. #	SG-Carboxypeptidase B (Recombinant) [™]	CPB Digestion Buffer [10X]
786-1249	0.1 mg	1 ml
786-1250	1 mg	10 ml

STORAGE CONDITIONS

SG-Carboxypeptidase B (Recombinant)[™] is shipped as lyophilized powder along with CPB digestion buffer [10X] on blue ice. Upon arrival, reconstitute to with sterile deionized water or 1 X CPB Digestion Buffer and store at -20°C. Store the CPB digestion buffer [10X] at 4°C. When stored properly, its stable for 1 year.

FEATURES

- Animal free source of origin, therefore no any other contaminating proteases.
- No protease inhibitors are present during preparation of SG-Recombinant Carboxypeptidase B[™]
- High Purity: HPLC grade; single band on SDS-PAGE; no other contaminating proteases such as chymotrypsin and carboxypeptidase A. Less than 10ppm of recombinant trypsin.
- Source: *E. coli*
- MW: 34.5 kDa
- Stability: SG-Carboxypeptidase B (Recombinant)[™] is shipped as lyophilized powder with stabilizing additives and so is highly stable.
- Unit definition: One unit of carboxypeptidase B hydrolysis one micromole of hippuryl-L-arginine per minute at 25°C, pH7.5
- Specific activity : ≥ 170 U/mg

PROTOCOL

Target protein preparation:

Dilute the CPB Digestion Buffer from 10 X to 1 X with deionized water. Dissolve or dilute the target protein to be digested in 1 X CPB Digestion Buffer.

Reconstitution of SG-Carboxypeptidase B (Recombinant)[™]

Add sterile deionized water or 1 X CPB Digestion Buffer to the lyophilized SG-Carboxypeptidase B (Recombinant)[™] to get concentration of 1-10mg/ml. Store in small aliquots preferably one time use at -20°C for future use.

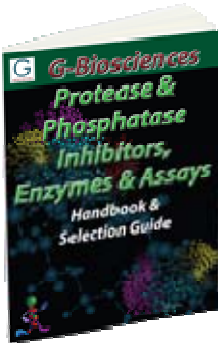
Digestion reaction:

- Dilute the CPB Digestion Buffer from 10 X to 1 X with deionized water. Use 1 X CPB Digestion Buffer for the reaction.
- Ratio SG-Carboxypeptidase B (Recombinant)[™] to target protein for digestion is 1:50 to 1:1000 (w/w).
- Incubate the reaction mixture for 2-16 hrs at room temperature.

NOTE: *These are general guidelines for digestion. One has to optimize condition depending upon the target protein and result desired.*

RELATED PRODUCTS

Download our Protease & Phosphatase Inhibitors, Enzyme & Assays Handbook.



<http://info.gbiosciences.com/protease-phosphatase-inhibitors-enzymes-assay-handbook>

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