



Recombinant Human Carboxypeptidase M and Antiserum

Technology Reference
CL41

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Stage of Development

- Human carboxypeptidase M and the anti-human carboxypeptidase M antiserum are available from UIC researchers

Description

Human carboxypeptidase M is a membrane-bound metalloprotease-peptide, which specifically cleaves carboxyl terminal arginine or lysine residues from peptides or proteins. The antiserum, rabbit anti-human carboxypeptidase M IgG, quantitatively immunoprecipitates the solubilized carboxypeptidase M.

Field of Application

hCPM is an attractive alternative for carboxypeptidase B used in the processing of porcine (bovine) proinsulin. The enzyme cleaves arginine of lysine from the C terminus of synthetic peptides as well as from several biologically active substrates. The reference articles suggest further research and diagnostic applications for both compounds.

Advantages

hCPM is a glycoprotein with an apparent Mr of 62,000. Because hCPM is located on the plasma membrane and optimal activity is at a neutral pH, immunological reactivity and catalytic properties are enhanced. We also believe that the very well-characterized hCPM is the first marker enzyme to be described for the Type I alveolar epithelial cell and that our polyclonal antibody to carboxypeptidase M is the first antibody marker for the human type I cell. Both markers should prove useful in studies of alveolar development.

References

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