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Product Information

Angiotensin Converting Enzyme from rabbit lung

Product Number **A6778**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

Enzyme Commission (EC) Number: 3.4.15.1

CAS Number: 9015-82-1

Synonym: ACE

The molecular weight has been reported to be approximately 129 kDa (sedimentation equilibrium with and without 6 M guanidine hydrochloride) and approximately 140 kDa (SDS gel electrophoresis).¹ The molecular weight has been reported to be 140 kDa (gel filtration).² The enzyme is a monomer, without subunits.

A 82 kDa peptide fragment isolated from this preparation shows about 23% of the original activity.²

The K_M for this enzyme is 2.6 mM using hippuryl-L-histidyl-L-leucine as the substrate.³

EDTA is described as being a strong inhibitor of this enzyme. This inhibition can be reversed by dialysis and reactivation with metal salts³

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

Soluble in water, approximately 1 mg/ml.

Storage/Stability

Solutions of this product at 1 mg/ml in 0.01 M potassium phosphate buffer, pH 7.0, containing 0.5 M NaCl stored at $-20\text{ }^{\circ}\text{C}$ retained full activity for several months; more dilute solutions were less stable.⁴

References

1. Das, M., and Soffer, R. L., Pulmonary angiotensin-converting enzyme. Structural and catalytic properties. *J. Biol. Chem.*, **250**, 6762-6768 (1975).
2. Iwata, K., et al., Rabbit pulmonary angiotensin-converting enzyme: the NH_2 -terminal fragment with enzymatic activity and its formation from the native enzyme by NH_4OH treatment. *Arch. Biochem. Biophys.*, **227**, 188-201 (1983).
3. Cushman, D. W., and Cheung, H. S., Spectrophotometric assay and properties of the angiotensin-converting enzyme of rabbit lung. *Biochem. Pharmacol.*, **20**, 1637-1648 (1971).
4. Stewart, T. A., et al., Human Peptidyl Dipeptidase (Converting Enzyme, Kininase II). *Meth. Enzymol.*, **80**, 450-460 (1981).

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