

AR05010PU-N**Rabbit ACE / CD143 - Purified****Alternate names:**

Angiotensin-converting enzyme, DCP, DCP1, Dipeptidyl carboxypeptidase I

Quantity:

0.25 U

Concentration:

10 Units/ml.

Background:

ACE converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. Also able to inactivate bradykinin, a potent vasodilator. ACE exists in two forms, a 170KD somatic form and a 90KD germinal form. The somatic form is expressed by endothelial cells (especially those of lung capillaries and arterioles), epithelial cells (especially in proximal renal tubules and small intestine), by some neuronal cells and variably by some macrophages and T lymphocytes. The germinal form is expressed by spermatozoa.

Uniprot ID:[P12822](#)**NCBI:**[NP_001075864.1](#)**GeneID:**[100009274](#)**Species:**

Rabbit

Source:

Lung, Rabbit

Format:**State:** Liquid purified protein from Rabbit lung.**Preservatives:** None**Stabilizers:** None**Applications:****Functional Assays.**

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description:

Purified ACE from Rabbit lung.

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

Biological Activity: One unit will produce 1.0 micromole of hippuric acid from hippuryl-His-Leu per minute in 50 mM HEPES and 300 mM NaCl at pH 8.3 at 37°C.

Specific Activity: 4.5 U/mg protein.

Inactivation: EDTA can be used as a strong inhibitor of this enzyme. This can be reversed by dialysis and reactivation with metal salts.

Molecular weight: Reported as approximately 129 kDa (sedimentation equilibrium with and without 6 M guanidine hydrochloride) and approximately 140 kDa (SDS gel electrophoresis and by gel filtration)

Storage:

Upon receipt, store undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.