

Human ACE protein, His tag

Cat. No. GTX00247-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

Angiotensin-converting enzyme ACE, is a central component of the renin-angiotensin system (RAS), which controls blood pressure by regulating the volume of fluids in the body. It converts the hormone angiotensin I to the active vasoconstrictor angiotensin II. Therefore, ACE indirectly increases blood pressure by causing blood vessels to constrict. ACE inhibitors are widely used as pharmaceutical drugs for treatment of cardiovascular diseases. Besides, Actin Beta (ACTb) has been identified as an interactor of ACE, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ACE and recombinant human ACTb. Briefly, ACE were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to ACTb-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ACE pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of ACE and ACTb was in a dose dependent manner.

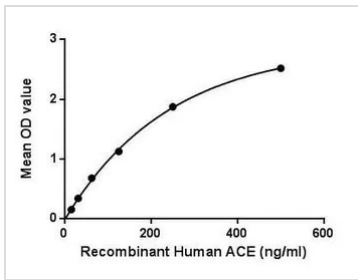
Observed MW (kDa) 20 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Ser1160~Ser1306 (NP_000780.1)**Expression System** E. coli**Purity** > 90%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

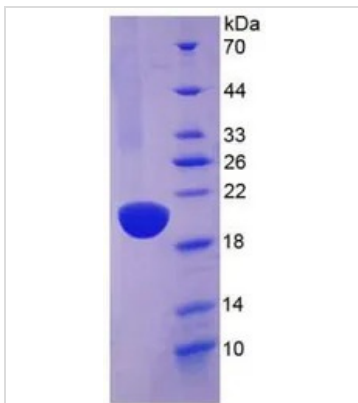
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DATA IMAGES



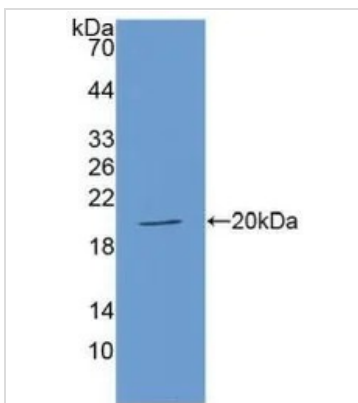
GTX00247-pro Functional Assay Image

Functional ELISA analysis of GTX00247-pro Human ACE protein which can bind immobilized ACTb protein.



GTX00247-pro Image

SDS-PAGE analysis of GTX00247-pro Human ACE protein.



GTX00247-pro Image

WB analysis of GTX00247-pro Human ACE protein.



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