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## Product Datasheet

### Human ACE protein, His tag, Unconjugated GTX00247-PRO

Article Name	Human ACE protein, His tag, Unconjugated
Biozol Catalog Number	GTX00247-PRO
Supplier Catalog Number	GTX00247-pro
Alternative Catalog Number	GTX00247-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	<a href="#">1636</a>
UniProt	<a href="#">P12821</a>
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Ser1160~Ser1306 (NP_000780.1)

Application Notes

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  $\mu$ l were then transferred to ACTb-coated microtiter wells and incubated for 2h at 37C. 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 37C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of ACE and ACTb was in a dose dependent manner.