abcam

Product datasheet

Mouse ACE ELISA Kit (CD143) ab155452

2 References 2 Images

Overview

Product name Mouse ACE ELISA Kit (CD143)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
overall				< 10%

Inter-assay

Sample	n	Mean	SD	CV%
overall				< 12%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 0.12 ng/ml

Range 0.123 ng/ml - 30 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	104.6	96% - 112%
Plasma	101.4	94% - 109%
Cell culture media	99.78	90% - 109%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Mouse

Product overview Abcam's ACE (CD143) Mouse ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay designed for the quantitative measurement of mouse ACE (CD143) in serum, plasma and cell culture supernatants.

This assay employs an antibody specific for mouse ACE coated on a 96-well plate. Standards and samples are pipetted into the wells and ACE present in a sample is bound to the wells by the

immobilized antibody. The wells are washed and biotinylated anti-mouse ACE antibody is added. After washing away unbound biotinylated antibody,

HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of ACE bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
600X HRP-Streptavidin Concentrate	1 x 200µl
ACE Microplate (12 x 8 wells)	1 unit
Assay Diluent A	1 x 30ml
Biotinylated anti-mouse ACE	2 vials
Recombinant Mouse ACE Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 8ml

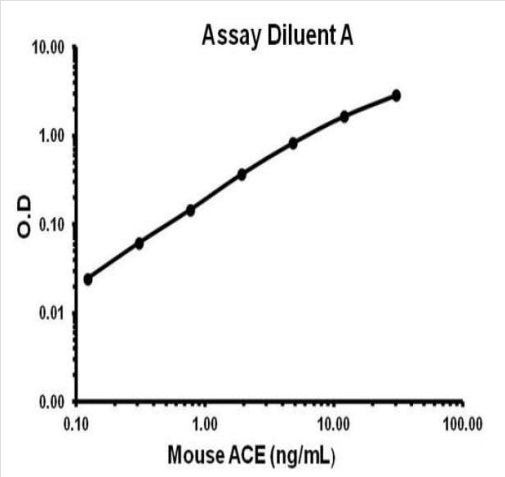
Function Converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. Also able to inactivate bradykinin, a potent vasodilator. Has also a glycosidase activity which releases GPI-anchored proteins from the membrane by cleaving the mannose linkage in the GPI moiety.

Tissue specificity Ubiquitously expressed, with highest levels in lung, kidney, heart, gastrointestinal system and prostate. Isoform Testis-specific is expressed in spermatocytes and adult testis.

Involvement in disease Ischemic stroke (ISCHSTR) [MIM:601367]: A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.
Renal tubular dysgenesis (RTD) [MIM:267430]: Autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype). Note=The disease is caused by mutations affecting the gene represented in this entry.
Microvascular complications of diabetes 3 (MVCD3) [MIM:612624]: Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include

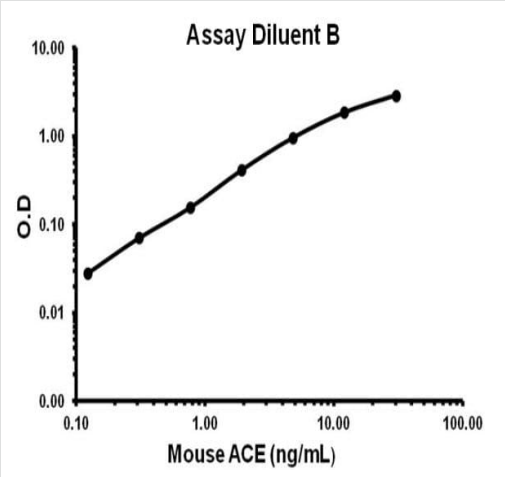
	diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry. Intracerebral hemorrhage (ICH) [MIM:614519]: A pathological condition characterized by bleeding into one or both cerebral hemispheres including the basal ganglia and the cerebral cortex. It is often associated with hypertension and craniocerebral trauma. Intracerebral bleeding is a common cause of stroke. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.
Sequence similarities	Belongs to the peptidase M2 family.
Post-translational modifications	Phosphorylated by CK2 on Ser-1299; which allows membrane retention.
Cellular localization	Secreted and Cell membrane.

Images



Typical Standard Curve

Representative standard curve using ab155452 - Assay Diluent A.



Typical Standard Curve

Representative standard curve using ab155452 - Assay Diluent B.

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