# abcam

# Product datasheet

# Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] ab75762

KO 評価済

リコンピナント

RabMAb

13 References 画像数 7

#### 製品の概要

製品名 Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757]

製品の詳細 Rabbit monoclonal [EPR2757] to Angiotensin Converting Enzyme 1

由来種 Rabbit

アプリケーション 適用あり: ELISA, WB, IHC-P

適用なし: Flow Cyt,ICC/IF or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse 🔷

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Fetal kidney, fetal heart and fetal lung lysates; human kidney and spleen tissues.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**バッファー** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

1

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EPR2757

アイソタイプ lgG

## アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab75762の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA		Use a concentration of 0.002 - 2 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 195 kDa (predicted molecular weight: 150 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt,ICC/IF or IP.

#### ターゲット情報

#### 機能

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.

#### 組織特異性

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

#### 関連疾患

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

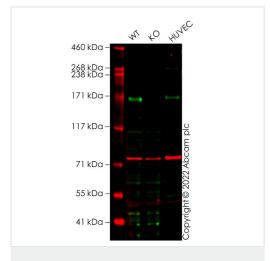
into one or both cerebral hemispheres including the basal ganglia and the cerebral cortex. It is often associated with hypertension and craniocerebral trauma. Intracerebral bleeding is a common cause of stroke. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

**配列類似性** Belongs to the peptidase M2 family.

翻訳後修飾 Phosphorylated by CK2 on Ser-1299; which allows membrane retention.

**細胞内局在** Secreted and Cell membrane.

#### 画像



Western blot - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762) **All lanes :** Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762) at 1/500 dilution

Lane 1: SKNFI cell lysate

Lane 2: Ace knockout SKNFI cell lysate

Lane 3: HUVEC cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

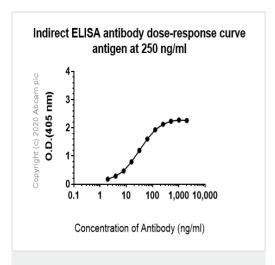
**All lanes :** Secondary antibodies used were Goat anti-Rabbit lgG H&L 800CW and Goat anti-Mouse lgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

**Predicted band size:** 150 kDa **Observed band size:** 170 kDa

Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] staining at 1/500 dilution, shown in green; Mouse anti-CANX [CANX/1543] (ab238078) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab75762 was shown to bind specifically to Angiotensin Converting Enzyme 1. A band was observed at 170 kDa in wild-type SKNFI cell lysates with no signal observed at this size in Ace knockout cell line. To generate this image, wild-type and Ace knockout SKNFI cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary

antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit lgG H&L 800CW and Goat anti-Mouse lgG H&L 680RD at 1/20000 dilution.



ELISA analysis of Human ACE (angiotensin converting enzyme) (membrane form only) recombinant protein at 250ng/ml with ab75762. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.

ELISA - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

kDa 1 2 3

25015010075503725-

Western blot - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

**All lanes :** Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762) at 1/1000 dilution

Lane 1 : fetal kidney lysate

Lane 2 : fetal heart lysate

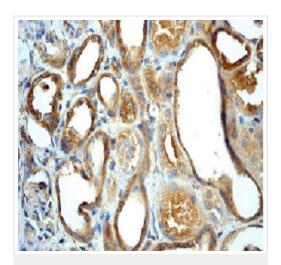
Lane 3 : fetal lung lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

All lanes: goat anti-rabbit HRP at 1/2000 dilution

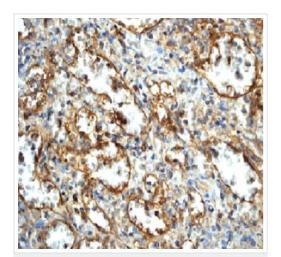
**Predicted band size:** 150 kDa **Observed band size:** 195 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Angiotensin Converting
Enzyme 1 antibody [EPR2757] (ab75762)

ab75762 at 1/100 dilution staining Angiotensin Converting Enzyme 1 in human kidney by Immunohistochemistry, Paraffin-embedded tissue.

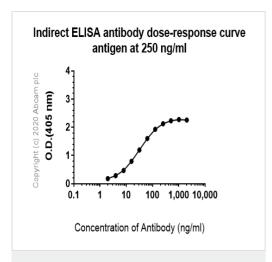
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Angiotensin Converting
Enzyme 1 antibody [EPR2757] (ab75762)

ab75762 at 1/100 dilution staining Angiotensin Converting Enzyme 1 in human spleen by Immunohistochemistry, Paraffin-embedded tissue. Note positive staining of endothelial cells.

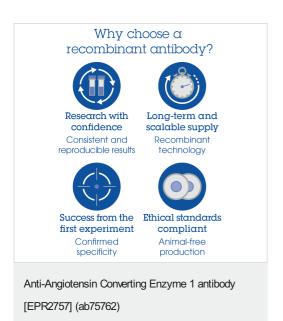
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



ELISA - Anti-Angiotensin Converting Enzyme 1

antibody [EPR2757] (ab75762)

ELISA analysis of Human ACE (angiotensin converting enzyme) (membrane form only) recombinant protein at 250 ng/mL with ab75762. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



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