Datasheet for ABIN3042841

anti-Angiotensin I Converting Enzyme 1 antibody (Middle Region)

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Overview

Quantity:	100 µg
Target:	Angiotensin I Converting Enzyme 1 (ACE)
Binding Specificity:	AA 702-715, Middle Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Angiotensin-converting enzyme(ACE) detection. Tested with WB, IHC-P in Human.
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human Angiotensin Converting Enzyme 1(702-715aa TQARKFDVNQLQNT).
Sequence:	TQARKFDVNQ LQNT
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Angiotensin-converting enzyme(ACE) detection. Tested with WB, IHC-P in Human. Gene Name: angiotensin I converting enzyme Protein Name: Angiotensin-converting enzyme
Purification:	Immunogen affinity purified.

Target Details

Target:	Angiotensin I Converting Enzyme 1 (ACE)
Alternative Name:	ACE (ACE Products)
Background:	Angiotensin I converting enzyme(ACE), also called DCP or CD143, is a zinc-containing dipeptidyl carboxypeptidase widely distributed in mammalian tissues and is though to play a critical role in blood pressure regulation. ACE gene is mapped to 17q23.3. This gene encodes an enzyme involved in catalyzing the conversion of angiotensin I into a physiologically active peptide angiotensin II. Angiotensin II is a potent vasopressor and aldosterone-stimulating peptide that controls blood pressure and fluid-electrolyte balance. This enzyme plays a key role in the renin-angiotensin system. Many studies have associated the presence or absence of a 287 bp Alu repeat element in this gene with the levels of circulating enzyme or cardiovascular pathophysiologies. Synonyms: ACE 1 antibody|ACE antibody|ACE T antibody|ACE_HUMAN antibody|ACE1 antibody|Angiotensin converting enzyme somatic isoform antibody|Angiotensin converting enzyme testis specific isoform antibody|Angiotensin I converting enzyme 1 antibody|Angiotensin I converting enzyme antibody|Angiotensin I converting enzyme peptidyl dipeptidase A 1 antibody|Angiotensin-converting enzyme antibody|Carboxycathepsin antibody|CD 143 antibody|CD143 antibody|CD143 antigen antibody|DCP 1 antibody|DCP antibody|DCP1 antibody|Dipeptidyl carboxypeptidase 1 antibody|Dipeptidyl carboxypeptidase I antibody|Kininase II antibody|MGC26566 antibody|MVCD3 antibody|Peptidase P antibody|Peptidyl dipeptidase A antibody|soluble form antibody|Testicular ECA antibody
UniProt:	P12821
Pathways:	ACE Inhibitor Pathway, Peptide Hormone Metabolism, Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour, Smooth Muscle Cell Migration

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.

Application Details

Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Expiry Date:	12 months

Publications

Product cited in:	Yao, Zhao, Ou, Liang, Lin, Wang: "MicroRNA-214 Suppresses Osteogenic Differentiation of Human Periodontal Ligament Stem Cells by Targeting ATF4." in: **Stem cells international**, Vol. 2017, pp. 3028647, (2017) (PubMed). Wang, Wang, Dai, Chen, Yang, Dai, Ou, Wang, Lin: "Effects of Intermittent Administration of Parathyroid Hormone (1-34) on Bone Differentiation in Stromal Precursor Antigen-1 Positive Human Periodontal Ligament Stem Cells." in: **Stem cells international**, Vol. 2016, pp. 4027542, (2016) (PubMed). Li, Chen, Peng, Zhou, Fang: "Pulsed electromagnetic fields protect the balance between

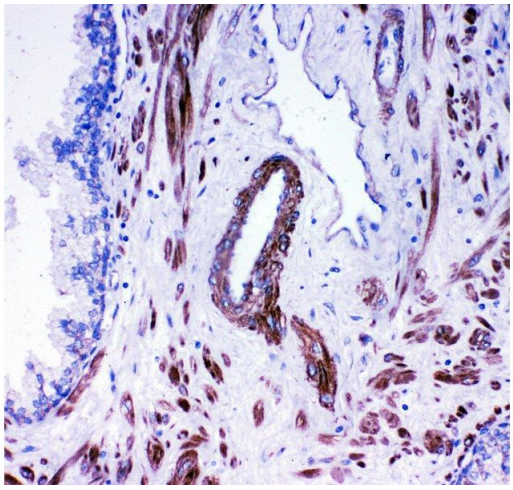
Publications

adipogenesis and osteogenesis on steroid-induced osteonecrosis of femoral head at the pre-collapse stage in rats." in: **Bioelectromagnetics**, Vol. 35, Issue 3, pp. 170-80, (2014) (PubMed).

Song, Yu, Zhao, Wei, Liu, Hu, Zhao, Yang, Wu: "The time-dependent manner of sinusoidal electromagnetic fields on rat bone marrow mesenchymal stem cells proliferation, differentiation, and mineralization." in: **Cell biochemistry and biophysics**, Vol. 69, Issue 1, pp. 47-54, (2014) (PubMed).

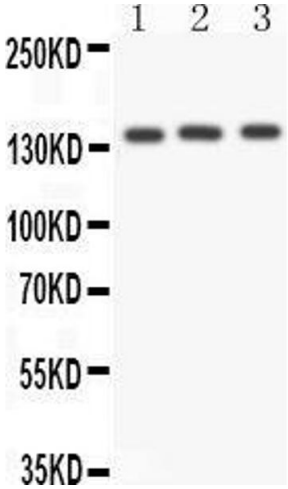
Mu, Lv, Wang, Ma, Ma, Liu, Yu, Mu: "Mechanical stress stimulates the osteo/odontoblastic differentiation of human stem cells from apical papilla via erk 1/2 and JNK MAPK pathways." in: **BioMed research international**, Vol. 2014, pp. 494378, (2014) (PubMed).

Images



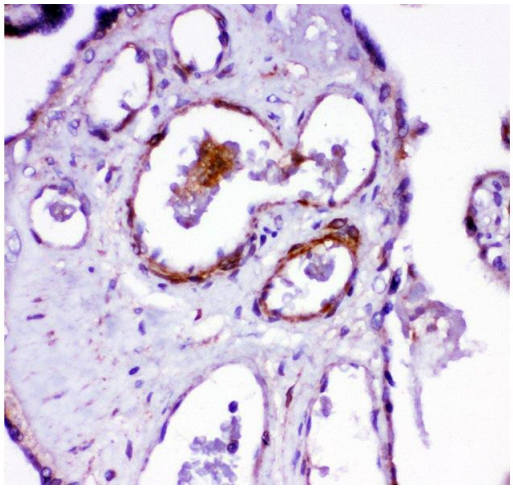
Immunohistochemistry

Image 1. Anti- ACE antibody, IHC(P) IHC(P): Human Prostatic Cancer Tissue



Western Blotting

Image 2. Anti- ACE antibody, Western blotting All lanes: Anti ACE () at 0.5ug/ml Lane 1: A549 Whole Cell Lysate at 40ug Lane 2: HELA Whole Cell Lysate at 40ug Lane 3: 22RV1 Whole Cell Lysate at 40ug Predicted bind size: 150KD Observed bind size: 150KD



Immunohistochemistry

Image 3. Anti- ACE antibody, IHC(P) IHC(P): Human Placenta Tissue

Please check the product details page for more images. Overall 4 images are available for ABIN3042841.