

ARG42483 anti-Angiotensinogen antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Angiotensinogen
Tested Reactivity	Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Angiotensinogen
Species	Mouse
Immunogen	Synthetic peptide corresponding to aa. 25-36 of Mouse Angiotensinogen. (DRVYIHPFLLLY)
Conjugation	Un-conjugated
Alternate Names	Des-Asp[1]-angiotensin II; Angiotensin III; SERPINA8; Angiotensinogen; Angiotensin 3-8; Ang IV; Ang I; Angiotensin I; Angiotensin II; Angiotensin 1-8; Angiotensin 1-10; Angiotensin IV; Ang III; Ang II; Angiotensin 2-8; ANHU; Serpin A8

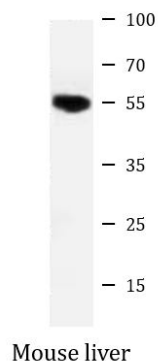
Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>WB</td><td>1:500 - 1:2000</td></tr> </table>	Application	Dilution	WB	1:500 - 1:2000
Application	Dilution				
WB	1:500 - 1:2000				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				
Observed Size	~ 55 kDa				

Properties

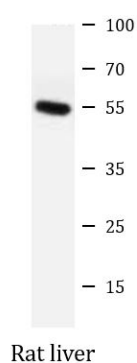
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Gene Symbol	AGT
Gene Full Name	angiotensinogen (serpin peptidase inhibitor, clade A, member 8)
Background	<p>The protein encoded by this gene, pre-angiotensinogen or angiotensinogen precursor, is expressed in the liver and is cleaved by the enzyme renin in response to lowered blood pressure. The resulting product, angiotensin I, is then cleaved by angiotensin converting enzyme (ACE) to generate the physiologically active enzyme angiotensin II. The protein is involved in maintaining blood pressure, body fluid and electrolyte homeostasis, and in the pathogenesis of essential hypertension and preeclampsia. Mutations in this gene are associated with susceptibility to essential hypertension, and can cause renal tubular dysgenesis, a severe disorder of renal tubular development. Defects in this gene have also been associated with non-familial structural atrial fibrillation, and inflammatory bowel disease. [provided by RefSeq, Nov 2019]</p>
Function	<p>Essential component of the renin-angiotensin system (RAS), a potent regulator of blood pressure, body fluid and electrolyte homeostasis.</p> <p>[Angiotensin-2]: acts directly on vascular smooth muscle as a potent vasoconstrictor, affects cardiac contractility and heart rate through its action on the sympathetic nervous system, and alters renal sodium and water absorption through its ability to stimulate the zona glomerulosa cells of the adrenal cortex to synthesize and secrete aldosterone.</p> <p>[Angiotensin-3]: stimulates aldosterone release.</p> <p>[Angiotensin 1-7]: is a ligand for the G-protein coupled receptor MAS1. Has vasodilator and antidiuretic effects. Has an antithrombotic effect that involves MAS1-mediated release of nitric oxide from platelets. [UniProt]</p>
Calculated Mw	52 kDa
PTM	<p>Beta-decarboxylation of Asp-34 in angiotensin-2, by mononuclear leukocytes produces alanine. The resulting peptide form, angiotensin-A, has the same affinity for the AT1 receptor as angiotensin-2, but a higher affinity for the AT2 receptor.</p> <p>In response to low blood pressure, the enzyme renin/REN cleaves angiotensinogen to produce angiotensin-1. Angiotensin-1 is a substrate of ACE (angiotensin converting enzyme) that removes a dipeptide to yield the physiologically active peptide angiotensin-2. Angiotensin-1 and angiotensin-2 can be further processed to generate angiotensin-3, angiotensin-4. Angiotensin 1-9 is cleaved from angiotensin-1 by ACE2 and can be further processed by ACE to produce angiotensin 1-7, angiotensin 1-5 and angiotensin 1-4. Angiotensin 1-7 has also been proposed to be cleaved from angiotensin-2 by ACE2 or from angiotensin-1 by MME (neprilysin).</p> <p>The disulfide bond is labile. Angiotensinogen is present in the circulation in a near 40:60 ratio with the oxidized disulfide-bonded form, which preferentially interacts with receptor-bound renin. [UniProt]</p>
Cellular Localization	Secreted. [UniProt]



ARG42483 anti-Angiotensinogen antibody WB image

Western blot: Mouse liver lysate stained with ARG42483 anti-Angiotensinogen antibody.



ARG42483 anti-Angiotensinogen antibody WB image

Western blot: Rat liver lysate stained with ARG42483 anti-Angiotensinogen antibody.