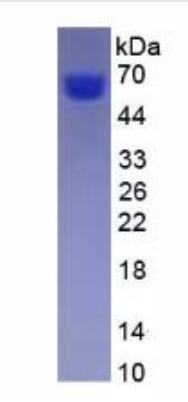
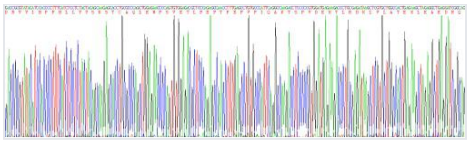
Angiotensinogen (AGT) Eukaryotic Protein

PRODUCT OVERVIEW

Product Name	Angiotensinogen (AGT), Protein
Full Product Name	Eukaryotic Angiotensinogen (AGT)
Product Gene Name	AGT protein
Product Synonym Names	ANHU; SERPINA8; Angiotensin; Renin Substrate; Serpin Peptidase Inhibitor, Clade A, Member 8(Alpha-1 Antiproteinase, Antitrypsin)
Host	293F cell
Form/Format	Freeze-dried powder
Purity/Purification	> 97%
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Molecular Weight	51.2kDa; 60kDa
3D Structure	ModBase 3D Structure for P01015
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Fragment	Asp25~Val477
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 5% Trehalose and Proclin300.
Source Note	Eukaryotic expression
Organism Species	Rat
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.3
Subcellular Location	Secreted
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Product Categories/Family for AGT protein	Eukaryotic proteins
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for AGT protein	Positive Control, Immunogen, SDS-PAGE, Western Blot (WB)
Related Product Information for AGT protein	MBS2086722 is a protein targeting AGT. Also known as Eukaryotic Angiotensinogen (AGT). Host: 293F cell.
Other Notes	Small volumes of AGT protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



SDS-Page of AGT protein



Testing Data of AGT protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for AGT. It may not necessarily be applicable to this product.

NCBI GI #	19705570
NCBI GeneID	24179
NCBI Accession #	NP_602308.1
UniProt Primary Accession #	P01015
UniProt Related Accession #	P01015
GenBank Nucleotide #	NM_134432.2
NCBI Official Full Name	angiotensinogen
NCBI Official Synonym Full Names	angiotensinogen
NCBI Official Symbol	Agt
NCBI Official Synonym Symbols	Ang; PAT; ANRT; AngII
UniProt Protein Name	Angiotensinogen
UniProt Synonym Protein Names	Serpin A8
Protein Family	Angiotensinogen
UniProt Gene Name	Agt
UniProt Synonym Gene Names	Serpina8; Ang I; Ang II; Ang III; Ang IV
NCBI Protein Information	angiotensinogen
NCBI Summary for AGT	plays a role in regulation of blood pressure [RGD, Feb 2006]

UniProt Comments for AGT	angiotensin: Essential component of the renin-angiotensin system (RAS), a potent regulator of blood pressure, body fluid and electrolyte homeostasis. In response to lowered blood pressure, the enzyme renin cleaves angiotensinogen to produce angiotensin-1 (angiotensin 1-10). Angiotensin-1 is a substrate of ACE (angiotensin converting enzyme) that removes a dipeptide to yield the physiologically active peptide angiotensin-2 (angiotensin 1- 8). Angiotensin-1 and angiotensin-2 can be further processed to generate angiotensin-3 (angiotensin 2-8), angiotensin-4 (angiotensin 3-8). Angiotensin 1-7 is cleaved from angiotensin-2 by ACE2 or from angiotensin-1 by MME (neprilysin). Angiotensin 1-9 is cleaved from angiotensin-1 by ACE2. Genetic variations in AGT are a cause of susceptibility to essential hypertension (EHT). Essential hypertension is a condition in which blood pressure is consistently higher than normal with no identifiable cause. Defects in AGT are a cause of renal tubular dysgenesis (RTD). RTD is an 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). Belongs to the serpin family. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 19q12 Cellular Component: cytoplasm; extracellular space; mitochondrion Molecular Function: angiotensin receptor binding; hormone activity; receptor agonist activity; serine-type endopeptidase inhibitor activity; sodium channel regulator activity; type 1 angiotensin receptor binding; type 2 angiotensin receptor binding Biological Process: activation of NF-kappaB-inducing kinase; aging; angiotensin mediated drinking behavior; angiotensin mediated regulation of renal output; angiotensin mediated vasoconstriction involved in regulation of systemic arterial blood pressure; artery smooth muscle contraction; astrocyte activation; blood vessel development; brain renin-angiotensin system; cell surface receptor linked signal transduction; cell-matrix adhesion; cellular sodium ion homeostasis; cytokine secretion; drinking behavior; elevation of cytosolic calcium ion concentration; establishment of blood-nerve barrier; excretion; extracellular matrix organization and biogenesis; female pregnancy; fibroblast proliferation; G-protein coupled receptor protein signaling pathway; hormone metabolic process; kidney development; negative regulation of angiogenesis; negative regulation of cell growth; negative regulation of cell proliferation; negative regulation of nerve growth factor receptor signaling pathway; negative regulation of neuron apoptosis; negative regulation of tissue remodeling; ovarian follicle rupture; peristalsis; phospholipase C activation; positive regulation of blood pressure; positive regulation of catalytic activity; positive regulation of cell proliferation; positive regulation of cellular protein metabolic process; positive regulation of cytokine secretion; positive regulation of epidermal growth factor receptor signaling pathway; positive regulation of fatty acid biosynthetic process; positive regulation of fibroblast proliferation; positive regulation of MAPKKK cascade; positive regulation of multicellular organism growth; positive regulation of nitric oxide biosynthetic process; positive regulation of organ growth; positive regulation of peptidyl-serine phosphorylation; positive regulation of peptidyl-tyrosine phosphorylation; positive regulation of phosphoinositide 3-kinase cascade; positive regulation of superoxide release; positive regulation of transcription, DNA-dependent; positive regulation of vasodilation; regulation of apoptosis; regulation of blood pressure; regulation of calcium ion transport; regulation of gene expression; regulation of heart rate; regulation of inflammatory response; regulation of long-term neuronal synaptic plasticity; regulation of norepinephrine secretion; regulation of systemic arterial blood pressure by circulatory renin-angiotensin; regulation of transmission of nerve impulse; renal response to blood flow during renin-angiotensin regulation of systemic arterial blood pressure; renal system process; renin-angiotensin regulation of aldosterone production; response to cold; response to muscle activity involved in regulation of muscle adaptation; response to salt stress; smooth muscle cell differentiation; smooth muscle cell proliferation; stress-activated MAPK cascade; ureteric bud branching; vasoconstriction; vasodilation
Research Articles on AGT	**1.** overproduction of O2 (-) through overexpression of CuZnSOD in the organum vasculosum of the lamina terminalis plays an important role in the development of chronic AngII-dependent hypertension
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