

Recombinant Human Angiotensinogen, His&GST-tagged

Cat. No. AGT-2183H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Angiotensinogen(Arg35~Ala485), fused with two N-terminal Tags, His-tag and GST-tag, was expressed in Prokaryotic expression.
Species	Human
Source	E.coli
ProteinLength	35-485 a.a.
Description	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 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.
Form	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Molecular Mass	76.7kDa
AA Sequence	The target protein is fused with two N-terminal Tags, His-tag and GST-tag, its

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sequence is listed below. MRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYIADKHN
 MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV DFLSKLPEML
 KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK
 KRIEAIPQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD GSTSGSGHHH
 HHHSAGLVPR GSTAIGMKET AAKFERQHM DSPDLGTLEV LFGPLGSEF-
 RVYIHP FHLVIHNEST CEQLAKANAGKPKDPTFIPA PIQAKTSPVD EKALQDQLVL
 VAAKLDTEDEK LRAAMVGMLA NFLGFRIYGMHSELWGVVHG ATVLSPTAVF
 GTLASLYLGA LDHTADRLQA ILGVPWKDKN CTSRLDAHKVLSALQAVQGL
 LVAQGRADSQ AQLLLSTVVG VFTAPGLHLK QPFVQGLALY
 TPVVLPRSLDFTELDVAAEK IDRFMQAVTG WKTGCSLMGA SVDSTLAFNT
 YVHFQGKMKG FSLLAEPQEFWVDNSTSVSV PMLSGMGTFQ HWSIDIQDNFS
 VTQVPFTESA CLLLIQPHYA SLDKVEGLTFQQNSLNWMK KLSPTIHLT
 MPQLVLQGSY DLQDLLAQAE LPAILHTELN LQKLSNDRIRVGEVLNSIFF
 ELEADEREPT ESTQQLNKPE VLEVTLNRPF LFAVYDQSAT ALHFLGRVANPLSTA

Endotoxin <1.0EU per 1g (determined by the LAL method)

Purity > 95%

Applications SDS-PAGE; WB; ELISA; IP.

Stability The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

Storage Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

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Reconstitution Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name AGT angiotensinogen (serpin peptidase inhibitor, clade A, member 8) [Homo sapiens (human)]

Official Symbol AGT

Synonyms AGT; angiotensinogen (serpin peptidase inhibitor, clade A, member 8); ANHU; FLJ92595; FLJ97926; SERPINA8; angiotensinogen; serpin A8; angiotensin I; angiotensin II; pre-angiotensinogen; alpha-1 antiproteinase, antitrypsin; serine (or cysteine) proteinase inhibitor; Angiotensin-1; Ang I; Angiotensin-2; Ang II; Angiotensin-3; Ang III; Angiotensin III

Gene ID 183

mRNA Refseq NM_000029

Protein Refseq NP_000020

MIM 106150

UniProt ID P01019

Chromosome Location 1q42.2

Pathway Hypertrophic cardiomyopathy (HCM); Renin-angiotensin system; Vascular smooth muscle contraction

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Function

acetyltransferase activator activity; growth factor activity; hormone activity; serine-type endopeptidase inhibitor activity; type 1 angiotensin receptor binding; type 2 angiotensin receptor binding

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