

## Human CellExp SERPIN A8, human recombinant protein

Angiotensinogen, SerpinA8, AGT, ANHU Catalog # PBV10866r

#### **Specification**

## Human CellExp SERPIN A8, human recombinant protein - Product info

Primary Accession P01019

Calculated MW

The protein is fused with 6×His tag at the

N-terminus, has a calculated MW of 50.6 kDa. The predicted N-terminus is Asp 34. DTT-reduced Protein migrates as 55-60

kDa due to glycosylation. KDa

# Human CellExp SERPIN A8, human recombinant protein - Additional Info

Gene ID 183
Gene Symbol AGT

**Other Names** 

Angiotensinogen, SerpinA8, AGT, ANHU

Gene Source Human

Source HEK 293 cells
Assay&Purity SDS-PAGE; ≥98%

Assay2&Purity2 HPLC; Recombinant Yes

**Target/Specificity** 

SERPINA8

# **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

# **Format**

Lyophilized powder

#### **Storage**

-20°C; Lyophilized from 0.22  $\mu m$  filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

# Human CellExp SERPIN A8, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Human CellExp SERPIN A8, human recombinant protein - Images

## Human CellExp SERPIN A8, human recombinant protein - Background

Serpin A8 also known as angiotensinogen (AGT) , is a member of the serpin family. It is an  $\alpha\text{-}2\text{-}globulin$  that is expressed by the liver and secreted in plasma. As essential component of the renin-angiotensin system (RAS), Angiotensinogen is cleaved into three chains: Angiotensin-1 (Ang I), Angiotensin-2 (Ang II), and Angiotensin-3 (Ang III) in lowered blood pressure by the enzyme renin. Angiotensin-1 is a substrate of ACE (angiotensin converting enzyme) that removes a dipeptide to yield the physiologically active peptide angiotensin-2. 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. Angiotensin-3 stimulates aldosterone release. Defects in AGT are a cause of renal tubular dysgenesis (RTD).

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Kageyama R., et al. Biochemistry 23:3603-3609(1984). Gaillard I., et al. DNA 8:87-99(1989). Fukamizu A., et al. J. Biol. Chem. 265:7576-7582(1990). Kunapuli S.P., et al. Circ. Res. 60:786-790(1987). Kunapuli S.P., et al. Arch. Biochem. Biophys. 254:642-646(1987).