

HUMAN MBP-AGTR1 FULL LENGTH PROTEIN-SYNTHETIC NANODISC

Cat.#: 11079-1

Product Name: Human MBP-AGTR1 full length protein-synthetic nanodisc

Synonyms: AG2S; AGTR1B; AT1; AT1AR; AT1B; AT1BR; AT1R; AT2R1; HAT1R

Target: AGTR1

UNIPROT ID: P30556

Description: Human MBP-AGTR1 full length protein-synthetic nanodisc

Background:

Angiotensin II is a potent vasopressor hormone and a primary regulator of aldosterone secretion. It is an important effector controlling blood pressure and volume in the cardiovascular system. It acts through at least two types of receptors. This gene encodes the type 1 receptor which is thought to mediate the major cardiovascular effects of angiotensin II. This gene may play a role in the generation of reperfusion arrhythmias following restoration of blood flow to ischemic or infarcted myocardium. It was previously thought that a related gene, denoted as AGTR1B, existed; however, it is now believed that there is only one type 1 receptor gene in humans. Alternative splicing of this gene results in multiple transcript variants.

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction, Renin-angiotensin system, Vascular smooth muscle contraction

Expression Host: HEK293

Tag: N-MBP Tag, C-Flag Tag

Molecular Weight: The human full length MBP-AGTR1 protein has a MW of 81.1 kDa

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

ELISA assay to evaluate MBP-AGTR1-Nanodisc 0.2µg Human MBP-AGTR1-Nanodisc per well

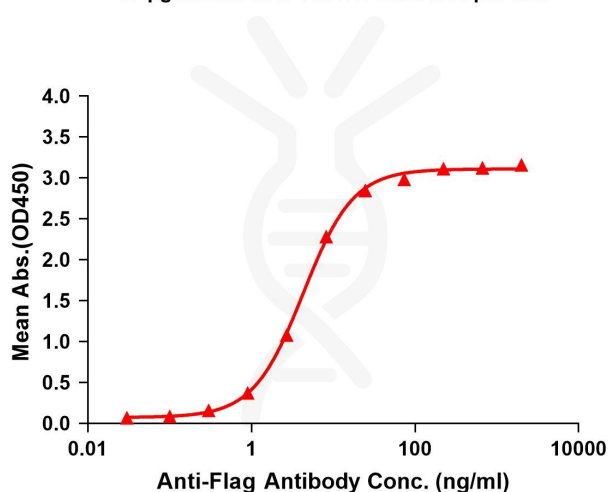


Figure 1. Elisa plates were pre-coated with N-MBP Tag, C-Flag Tag MBP-AGTR1-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with MBP-AGTR1-Nanodisc is 4.309ng/ml.

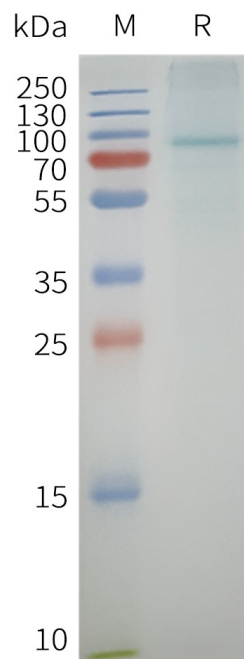


Figure 2. Human MBP-AGTR1-Nanodisc with N-MBP Tag, C-Flag Tag on SDS-PAGE