

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	AGTR2
Synonyms	AT2; ATGR2; MRX88
Description	Human AGTR2-Strep full length protein-synthetic nanodisc
Uniprot ID	P50052
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction, Renin-angiotensin system
Molecular Weight	The human full length AGTR2-Strep protein has a MW of 41.2 kDa
Delivery	In Stock
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. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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.
Background	The protein belongs to the G-protein coupled receptor 1 family, and functions as a receptor for angiotensin II. It is an intergral membrane protein that is highly expressed in fetus and in neonates, but scantily in adult tissues, except brain, adrenal medulla, and atretic ovary. This receptor has been shown to mediate programmed cell death and this apoptotic function may play an important role in developmental biology and pathophysiology. Mutations in this gene are been associated with X-linked cognitive disability. Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and SARS-CoV-2 infection results in down-regulation of angiotensin converting enzyme-2 (ACE2) receptors, the effects of which, triggers serious inflammatory lesions in the tissues involved, primarily in the lungs. The inflammatory reaction appears to be mediated by angiotensin II derivatives, including the angiotensin AT2 receptor which has been found to be upregulated in bronchoalveolar lavage samples from Coronavirus disease 2019 (COVID19) patients.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate AGTR2-Strep-Nanodisc 0.2 μ g Human AGTR2-Strep-Nanodisc per well

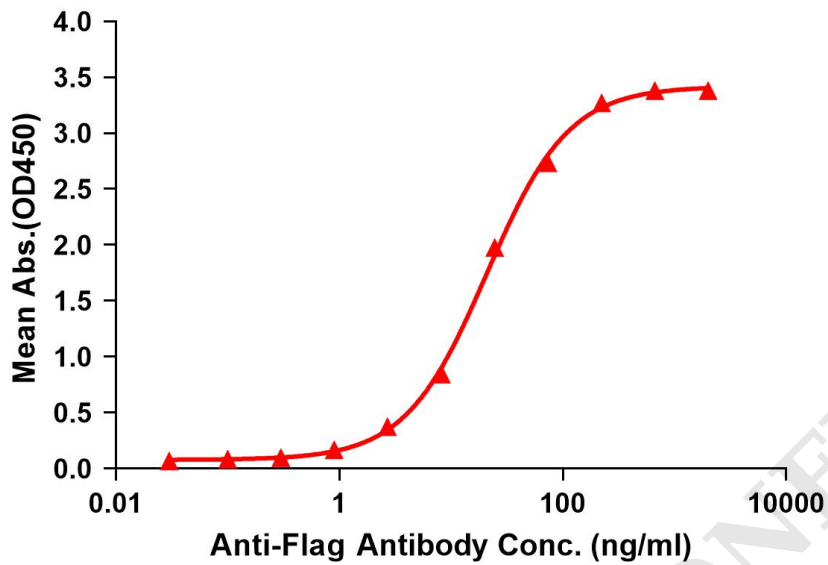


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag AGTR2-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with AGTR2-Strep-nanodisc is 21.00ng/ml.

kDa M R



Figure 2. WB analysis of Human AGTR2-Strep-Nanodisc with Strep-Tactin HRP at 1/4000 dilution

