PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	ADRB1
Synonyms	ADRB1R; B1AR; BETA1AR; FNSS2; RHR
Description	Human ADRB1 full length protein-synthetic nanodisc
Uniprot ID	P08588
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Calcium signaling pathway, Dilated cardiomyopathy, Endocytosis, Gap junction, Neuroactive ligand-receptor interaction
Molecular Weight	The human full length ADRB1 protein has a MW of 51.2 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 adrenergic receptors (subtypes alpha 1, alpha 2, beta 1, and beta 2) are a prototypic family of guanine nucleotide binding regulatory protein-coupled receptors that mediate the physiological effects of the hormone epinephrine and the neurotransmitter norepinephrine. Beta-1 adrenoceptors are predominately located in the heart. Specific polymorphisms in this gene have been shown to affect the resting heart rate and can be involved in heart failure.
Usage	Research use only
Conjugate	Unconjugated

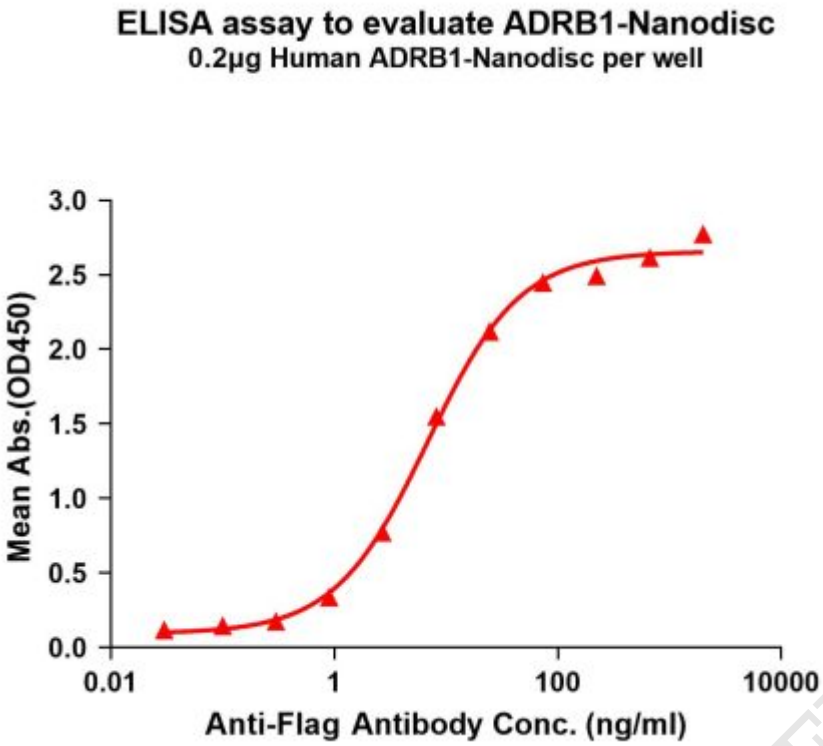

Figure1. Elisa plates were pre-coated with Flag Tag ADRB1-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with ADRB1-Nanodisc is 6.812ng/ml.

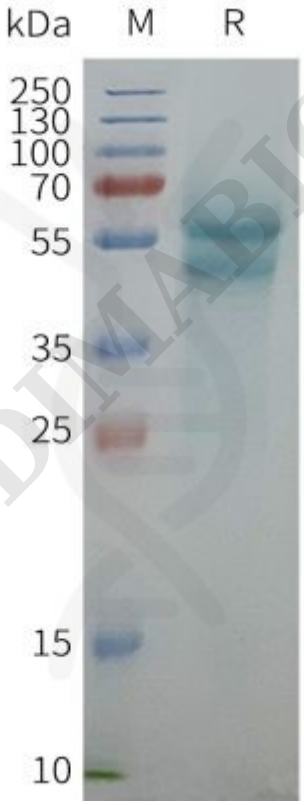

Figure2. Human ADRB1-Nanodisc, Flag Tag on SDS-PAGE