

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	ADRB2
Synonyms	ADRB2R; ADRBR; B2AR; BAR; BETA2AR
Description	Human ADRB2-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	P07550
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Calcium signaling pathway, Endocytosis, Neuroactive ligand-receptor interaction
Molecular Weight	The human full length ADRB2-Strep protein has a MW of 46.5 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. 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.
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	A member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This receptor is also a transcription regulator of the alpha-synuclein gene, and together, both genes are believed to be associated with risk of Parkinson's Disease. This gene is intronless. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity, type 2 diabetes and cardiovascular disease.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate ADRB2-Strep-Nanodisc 0.2 μ g Human ADRB2-Strep-Nanodisc per well

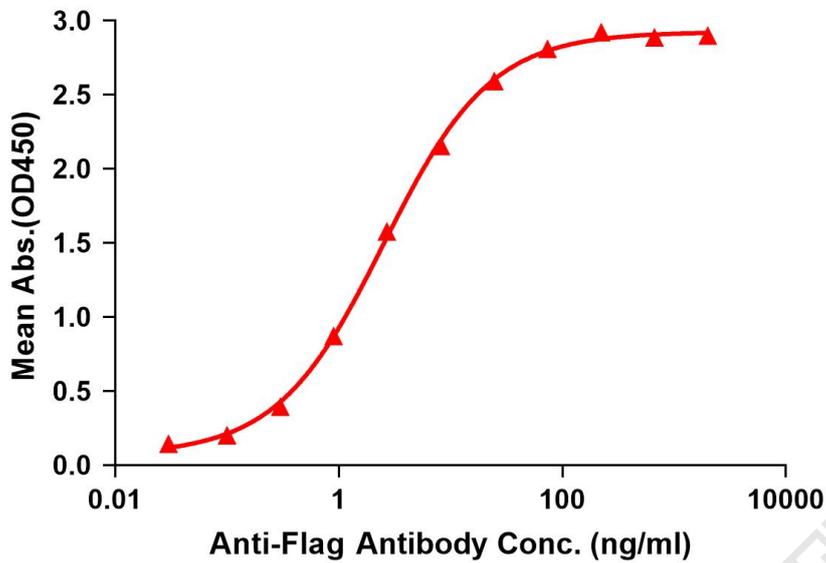


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag ADRB2-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with ADRB2-Strep-nanodisc is 2.538ng/ml.

kDa M R

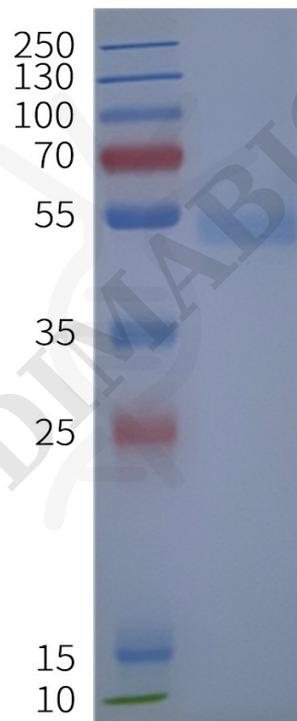


Figure 2. Human ADRB2-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

