

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	DRD4
Synonyms	D4DR
Description	Human DRD4-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	P21917
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length DRD4-Strep protein has a MW of 43.9 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	This protein is D4 subtype of the dopamine receptor. The D4 subtype is a G-protein coupled receptor which inhibits adenylyl cyclase. It is a target for drugs which treat schizophrenia and Parkinson disease. Mutations in this gene have been associated with various behavioral phenotypes, including autonomic nervous system dysfunction, attention deficit/hyperactivity disorder, and the personality trait of novelty seeking. This gene contains a polymorphic number (2-10 copies) of tandem 48 nt repeats; the sequence shown contains four repeats.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate DRD4-Strep-Nanodisc 0.2 μ g Human DRD4-Strep-Nanodisc per well

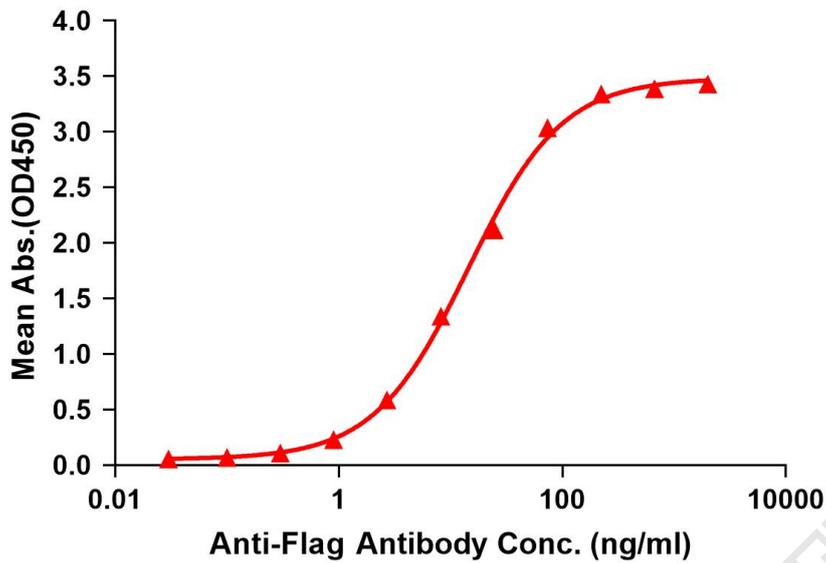


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag DRD4-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with DRD4-Strep-nanodisc is 14.40ng/ml.

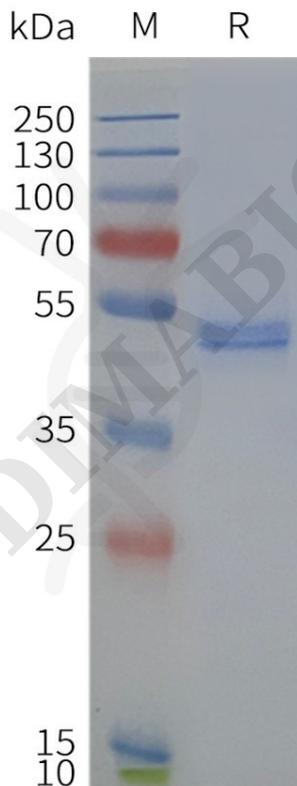


Figure 2. Human DRD4-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

