



[Go to Product page](#)

Datasheet for ABIN7538215
Dopamine d2 Receptor Protein

Overview

Quantity:	50 µg
Target:	Dopamine d2 Receptor (DRD2)
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human DRD2 full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified.

Target Details

Target:	Dopamine d2 Receptor (DRD2)
Alternative Name:	DRD2 (DRD2 Products)
Background:	This gene encodes the D2 subtype of the dopamine receptor. This G-protein coupled receptor inhibits adenylyl cyclase activity. A missense mutation in this gene causes myoclonus dystonia, other mutations have been associated with schizophrenia. Alternative splicing of this gene results in two transcript variants encoding different isoforms. A third variant has been described, but it has not been determined whether this form is normal or due to aberrant

Target Details

splicing. [provided by RefSeq, Jul 2008]

Molecular Weight: The human full length DRD2 protein has a MW of 50.6kDa

UniProt: [P14416](#)

Pathways: [Positive Regulation of Peptide Hormone Secretion](#), [Negative Regulation of Hormone Secretion](#), [cAMP Metabolic Process](#), [Inositol Metabolic Process](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Feeding Behaviour](#), [Negative Regulation of Transporter Activity](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

Application Details

Comment: Advantages of Synthetic Nanodiscs:

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane environment and remain biologically active
- No detergent and can be used for cell-based assays
- No MSP backbone proteins

Limitations of Synthetic Nanodiscs:

- Intolerant to acids and high concentrations of divalent metal ions

Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: 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.

Storage: -20 °C,-80 °C

Storage Comment: 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.

Expiry Date: 12 months