PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	CB1
Synonyms	CANN6; CB-R; CNR1; CB1A; CB1K5; CB1R; CNR
Description	Human CB1 full length protein-synthetic nanodisc
Uniprot ID	P21554
Protein Families	GPCR
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length CB1 Protein has a MW of 52.7 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 cannabinoids, principally delta-9-tetrahydrocannabinol and synthetic analogs, are psychoactive ingredients of marijuana. The cannabinoid receptors are members of the guanine-nucleotide-binding protein (G-protein) coupled receptor family, which inhibit adenylate cyclase activity in a dose-dependent, stereoselective and pertussis toxin-sensitive manner. The two receptors have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition) experienced by users of marijuana. Multiple transcript variants encoding two different protein isoforms have been described for this gene.
Usage	Research use only
Conjugate	Unconjugated

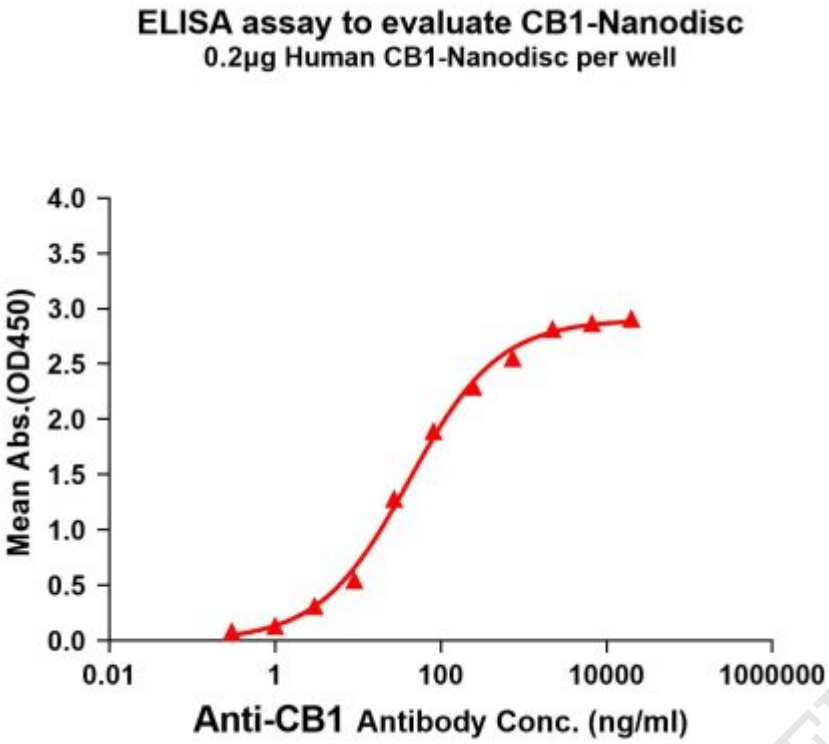

Figure1. Elisa plates were pre-coated with Flag Tag CB1-Nanodisc (0.2μg/per well). Serial diluted anti-CB1 monoclonal antibody (DME100144) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CB1 monoclonal antibody binding with CB1-Nanodisc is 41.62ng/ml.

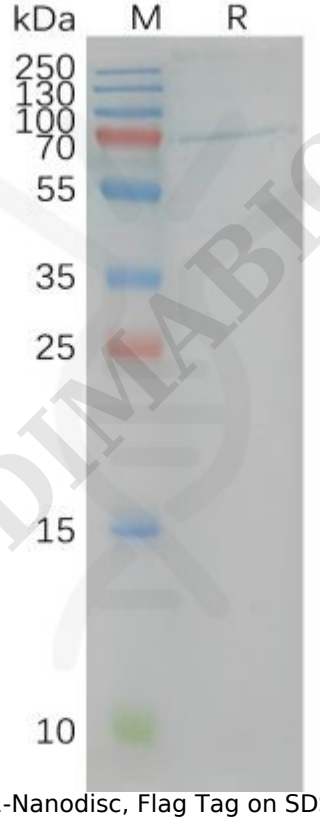

Figure2. Human CB1-Nanodisc, Flag Tag on SDS-PAGE