

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 membrane nanoparticles (MNPs)
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 sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
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



ELISA assay to evaluate CB1-MNPs

0.5 μ g Human CB1-MNPs per well

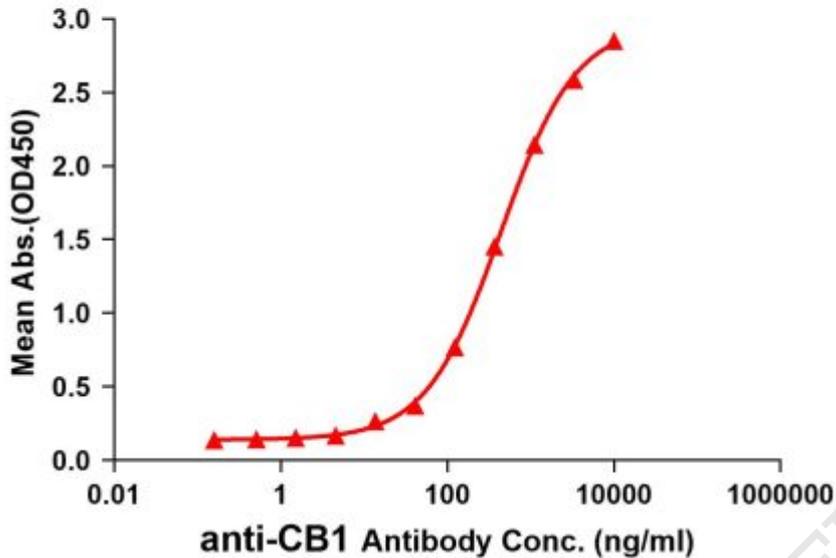


Figure1. Elisa plates were pre-coated with 0.5 μ g/per well purified human CB1 full length membrane nanoparticles. Serial diluted anti-CB1 monoclonal antibody (DME100144) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CB1 monoclonal antibody binding with CB1 full length membrane nanoparticles is 439.6ng/ml.

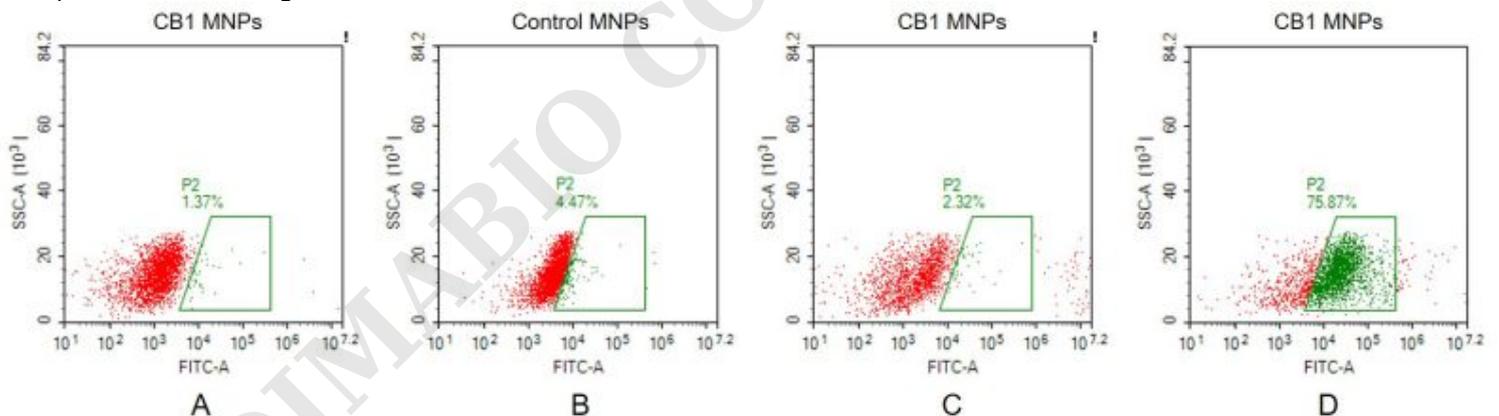


Figure2. FACS analysis of CB1 MNPs A. Negative Control 1: CB1 full length membrane nanoparticles samples were stained only with Goat anti-human IgG 488 secondary antibody. B. Negative Control 2: Control membrane nanoparticles samples were stained with anti-CB1 antibody (BME100049) at 2 μ g/mL, followed by Goat anti-human IgG 488 secondary antibody. C. Negative Control 3: CB1 full length membrane nanoparticles samples were stained with anti-CCR8 antibody (an irrelevant antibody) at 2 μ g/mL, followed by Goat anti-human IgG 488 secondary antibody. D. CB1 full length membrane nanoparticles samples were stained with anti-CB1 antibody (BME100049) at 2 μ g/mL, followed by Goat anti-human IgG 488 secondary antibody.

