

HUMAN CB1 PROTEIN, HFC TAG

Cat.#: 11311

Product Name: Human CB1 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: CANN6;CB-R;CB1;CB1A;CB1K5;CB1R;CNR

Target: CB1

UNIPROT ID: P21554

Description: Recombinant Human CB1 protein with C-terminal human Fc

Background: This gene encodes one of two cannabinoid receptors. 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.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 44.2 kDa after removal of the signal peptide. The apparent molecular mass of CB1-hFc is approximately 70-100 kDa due to glycosylation.

Molecular Characterization: CB1(Met1-Gln116) (Asp176-Asn187) (Asn256-Glu273) (Asp366-Thr377) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

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.

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.

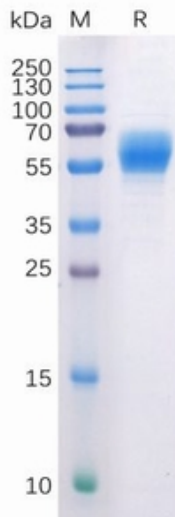


Figure 1. Human CB1 Protein, hFc Tag on SDS-PAGE under reducing condition.

Human CB1 Protein, hFc Tagged protein ELISA
0.2 μ g of Human CB1, hFc tagged protein per well

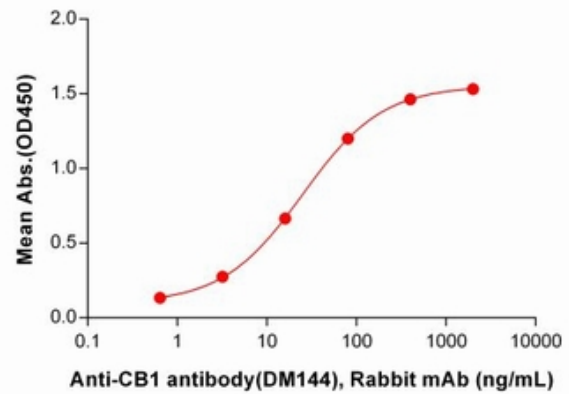


Figure 2. ELISA plate pre-coated by 2 μ g/ml (100 μ l/well) Human CB1 Protein, hFc Tag (11311) can bind Anti-CB1 antibody(DM144), Rabbit mAb in a linear range of 3.20-16 ng/mL.