

## HUMAN CB1 (1-116) PROTEIN, HFC TAG

**Cat.#:** 11310

**Product Name:** Human CB1 (1-116) 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 39.3 kDa after removal of the signal peptide. The apparent molecular mass of CB1-hFc is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** CB1(Met1-Gln116) 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.

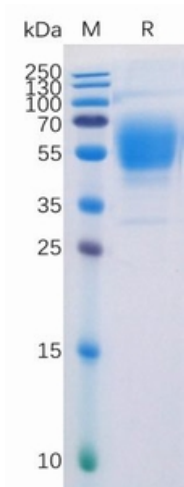


Figure 1. Human CB1 Protein, hFc Tag on SDS-PAGE under reducing condition.

## Human CB1 (1-116) Protein, hFc Tagged protein ELISA

0.2  $\mu$ g of Human CB1(1-116), hFc tagged protein per well

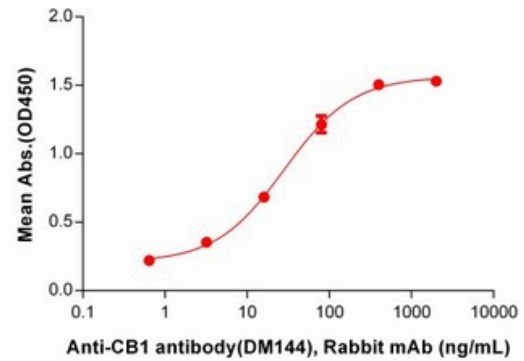


Figure 2. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human CB1(1-116) Protein, hFc Tag (11310) can bind Anti-CB1 antibody(DM144), Rabbit mAb in a linear range of 3.20-16 ng/mL.