

**HUMAN CD164 PROTEIN, HFC TAG****Cat.#:** 11452**Product Name:** Human CD164 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** LMOR;M-OR-1;MOP;MOR;MOR1;OPRM**Target:** CD164**UNIPROT ID:** Q04900**Description:** Recombinant Human CD164 with C-terminal human Fc tag

**Background:** This gene encodes one of at least three opioid receptors in humans; the mu opioid receptor (MOR). The MOR is the principal target of endogenous opioid peptides and opioid analgesic agents such as beta-endorphin and enkephalins. The MOR also has an important role in dependence to other drugs of abuse, such as nicotine, cocaine, and alcohol via its modulation of the dopamine system. The NM\_001008503.2:c.118A>G allele has been associated with opioid and alcohol addiction and variations in pain sensitivity but evidence for it having a causal role is conflicting. Multiple transcript variants encoding different isoforms have been found for this gene. Though the canonical MOR belongs to the superfamily of 7-transmembrane-spanning G-protein-coupled receptors some isoforms of this gene have only 6 transmembrane domains. [provided by RefSeq, Oct 2013]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 40.7 kDa after removal of the signal peptide. The apparent molecular mass of CD164-hFc is approximately 70-130 kDa due to glycosylation.

**Molecular Characterization:** CD164(Asp24-Asp162) 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.

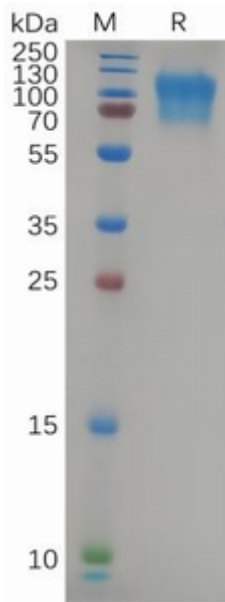


Figure 1. Human CD164 Protein, hFc Tag on SDS-PAGE under reducing condition.