HUMAN CA12 PROTEIN, HFC TAG

Cat.#: 11574

Product Name: Human CA12 Protein

Size : 10 µg, 50 µg and 100 µg

Synonyms: CA-XII

Target: CA12

UNIPROT ID: O43570

Description: Recombinant human CA12 protein with C-terminal human Fc tag

Background: Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2014]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 57.3 kDa after removal of the signal peptide. The apparent molecular mass of CA12-hFc is approximately 55-70 kDa due to glycosylation.

Molecular Characterization: CA12(Ala25-Ser301) 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.

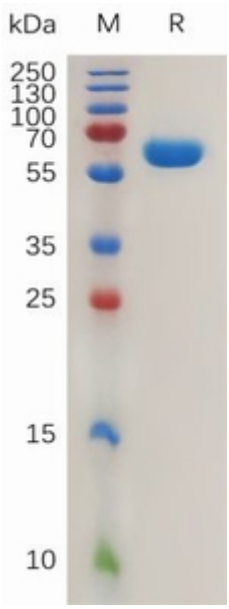

Figure 1. Human CA12 Protein, hFc Tag on SDS-PAGE under reducing condition.