

Recombinant Human AGRP Protein(Trx Tag)

Catalog Number: PDEH100521

Note: Centrifuge before opening to ensure complete recovery of vial contents.

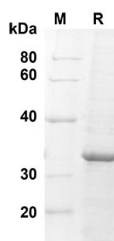
Description

Species	Human
Source	E.coli-derived Human AGRP protein Ala21-Thr132, with an N-terminal Trx
Calculated MW	32.2 kDa
Observed MW	34 kDa
Accession	O00253
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human AGRP proteins, 2 µg/lane of Recombinant Human AGRP proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 32.2 KD

Background

Agouti Related Protein (AGRP, or AGRT), is an endogenous antagonist of the melanocortin receptors MC3R and MC4R found in the hypothalamus and exhibits potent orexigenic activity. AGRP can act as a competitive antagonist to proopiomelanocortin (POMC)-derived peptides at the melanocortin-4 receptor (MC4R), and that this homeostatic mechanism is important as a means of coordinating appetite with an perceived metabolic requirement. AGRP is upregulated by fasting while intracerebroventricular injections of synthetic AGRP lead to increased appetite and food intake. Thus, AGRP is a powerful orexigenic peptide that increases food intake when ubiquitously overexpressed or when administered centrally.