# **Human AgRP Protein (Fc Tag)**

Catalog Number: 10070-H02H



## **General Information**

#### Gene Name Synonym:

AGRT: ART: ASIP2

#### **Protein Construction:**

A DNA sequence encoding the human AgRP (NP\_001129.1) (Met 1-Thr 132) was expressed with the fused Fc region of human IgG1 at the C-terminus

Source: Human

Expression Host: HEK293 Cells

**QC** Testing

Purity: ≥ 95 % as determined by SDS-PAGE

**Endotoxin:** 

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ala 21

## **Molecular Mass:**

The recombinant human AgRP/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 350 amino acids and predicts a molecular mass of 39 kDa also estimated by SDS-PAGE under reducing conditions.

#### Formulation:

Lyophilized from sterile PBS, pH 7.2

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

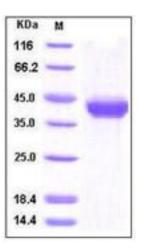
Store it under sterile conditions at -20  $^{\circ}$ C to -80  $^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



## **Protein Description**

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 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.

#### References

1.IInytska O, et al. (2008) The role of the Agouti-Related Protein in energy balance regulation. Cell Mol Life Sci. 65(17): 2721-31. 2.Pritchard LE, et al. (2005) Agouti-related protein: more than a melanocortin-4 receptor antagonist? Peptides. 26(10): 1759-70. 3.Sttz AM, et al. (2005) The agouti-related protein and its role in energy homeostasis. Peptides. 26(10): 1771-81

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • http://www.sinobiological.com