Human ADCYAP1R1 Protein (Fc Tag)

Catalog Number: **13223-H02H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

PAC1, PAC1R, PACAPR, PACAPRI

Protein Construction:

A DNA sequence encoding the human ADCYAP1R1 (P41586) extracellular domain (Met 1-Ala 155) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 88 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

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

Predicted N terminal: Asp 24

Molecular Mass:

The recombinant human ADCYAP1R1/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 373 amino acids and has a predicted molecular mass of 42 kDa. The reduced monomer migrates as an approximately 65 kDa band in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

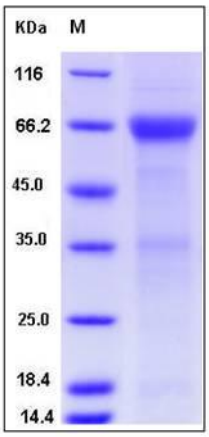
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Pituitary adenylate cyclase-activating polypeptide type Ⅰ receptor also known as ADCYAP1R1 is a type Ⅰ adenylate cyclase activating polypeptide receptor, which is a membrane-associated protein and shares significant homology with members of the glucagon / secretin receptor family. It is also a G-protein-coupled receptor referred to as PAC1. The activity of this receptor is mediated by G proteins which activate cyclase. This receptor mediates diverse biological actions of adenylate cyclase activating polypeptide 1 and is positively coupled to adenylate cyclase. It may regulate the release of adrenocorticotropin, luteinizing hormone, growth hormone, prolactin, epinephrine, and catecholamine. ADCYAP1R1 plays a role in spermatogenesis and sperm motility and causes smooth muscle relaxation and secretion in the gastrointestinal tract. In a word, ADCYAP1R1 / PAC1 is involved in daytime regulation of the biological clock, emotional control of behavior, anxiolysis and control of adrenal medulla catecholamine release.

References

1. Solano RM. et al., 1996, Endocrinology. 137 (7): 2815-22.
2. Miampamba M. et al., 2002, Regul Pept. 105 (3): 145-54.
3. Brabet P. et al., 1997, Genomics. 38 (1): 100-2.