

# **Human CGRP, His Tag, HEK293**

 Catalog Number
 LDG038PHM

 Package
 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



## **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>90% as determined by SDS-PAGE analysis.

**Endotoxin Level** 

<0.1 EU per 1  $\mu g$  of the protein by the LAL method.

**Expression System** 

HEK293

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 7.4

Molecular weight

The protein has a calculated MW of 13.6 kDa. The protein migrates as 10-15 kDa under reducing condition (SDS-PAGE analysis).

**Form** 

Lyophilized

# **Background**



### **Background**

CALCA, also known as calcitonin gene-related peptide alpha (CGRP-alpha), is a neuropeptide encoded by the CALCA gene. It is widely distributed in the central and peripheral nervous systems and plays a crucial role in nociceptive signaling, vasodilation, and neurogenic inflammation. CALCA exists in multiple isoforms, including  $\alpha$ ,  $\beta$ , and  $\gamma$ -CGRP, with  $\alpha$ -CGRP being the predominant form in humans. Elevated levels of CALCA, particularly  $\alpha$ -CGRP, are implicated in migraine pathophysiology, where it contributes to pain transmission and vasodilation. Additionally, CALCA is involved in various physiological processes, including cardiovascular regulation, gastrointestinal motility, and bone metabolism. Targeting CALCA or its receptors has therapeutic potential for the treatment of migraine, pain disorders, and other conditions influenced by neuropeptide signaling.

#### **Sequence Note**

Met1-Asn141

#### **Synonyms**

Calcitonin, CALCA

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

#### **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



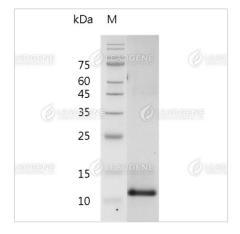
## **Stability & Storage**

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

# **Image**



SDS-PAGE analysis of recombinant human CGRP.

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