# Recombinant Human ECE-2 Protein (His Tag)

**Catalog Number: PKSH031761**

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

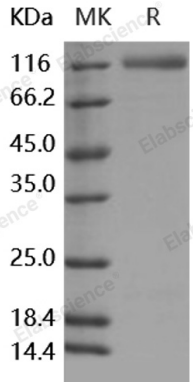
## Description

| | |
|---|---|
| **Species** | Human |
| **Source** | HEK293 Cells-derived Human ECE-2 protein Gly 199-Trp 883, with an N-terminal His |
| **Calculated MW** | 80.2 kDa |
| **Observed MW** | 120-125 kDa |
| **Accession** | NP_055508.3 |
| **Bio-activity** | Not validated for activity |

## Properties

| | |
|---|---|
| **Purity** | > 93 % as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 93 % as determined by reducing SDS-PAGE.

## Background

Endothelin-converting enzyme 2; also known as ECE-2; is a metalloprotease that possesses many properties consistent with it being a neuropeptide-processing enzyme. Endothelin-converting enzymes (ECEs) are the key enzymes in the endothelin (ET) biosynthesis that catalyze the conversion of big ET; the biologically inactive precursor of mature ET. Two enzymes; termed ECE-1 and ECE-2; have been molecularly identified. ECE-2 is found primarily in neural tissues; with high levels of expression in midbrain; cerebellum; hypothalamus; frontal cortex and spinal cord and moderate levels in hippocampus and striatum. ECE-2 is strongly down-regulated in inferior parietal lobe from Alzheimer disease patients (at protein level). ECE-2 converts big endothelin-1 to endothelin-1. It is involved in the processing of various neuroendocrine peptides; including neurotensin; angiotensin I; substance P; proenkephalin-derived peptides; and prodynorphin-derived peptides. ECE-2 may limit beta-amyloid peptide accumulation in brain. It may also have methyltransferase activity. A comparison of residues around the cleavage site revealed that ECE-2 exhibits a unique cleavage site selectivity that is related to but distinct from that of ECE-1.


Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web:www.elabscience.com
Email:techsupport@elabscience.com