

# Recombinant Protein Technical Manual Recombinant Human ECE1 Protein (His Tag)

**RPES2975** 

#### **Product Data:**

**Product SKU:** RPES2975 **Size:** 10μg

Species: Human Cells

Uniprot: P42892

### **Protein Information:**

Molecular Mass: 78.8 kDa

AP Molecular Mass: 9430 kDa

Tag: N-His

**Bio-activity:** 

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

Application:

**Synonyms:** Endothelin-converting enzyme 1; ECE

## Immunogen Information:

Sequence: Gln90-Trp770

## Background:

Endothelin-Converting Enzyme (ECE) is a single-pass type I I transmembrane (TM) protein with a short cytoplasmic tail and a large ectodomain. ECE is a zinc protease of the neprilysin (NEP) family, which also includes ECE-2, PEX, XCE, DINE, and Kell, and several NEP-like proteins. It is widely expressed and has several alternatively spliced forms that differ in their TM domain or cytoplasmic tail. All isoforms of ECE are expressed in umbilical vein endothelial cells, polynuclear neutrophils, fibroblasts, atrium cardiomyocytes and ventricles. Endothelin-converting enzyme is involved in the proteolytic processing of Endothelin (EDN1), Endothelin-2 (EDN2), and Endothelin-3 (EDN3) to biologically active peptides. Defects in ECE1 are a cause of Hirschsprung disease, cardiac defects and autonomic dysfunction (HSCRCDAD). It is a form of Hirschsprung disease with skip-lesions defects, craniofacial abnormalities and other dysmorphic features, and autonomic dysfunction.