

# Recombinant Protein Technical Manual Recombinant Human ECE-2 Protein (Fc Tag)

**RPES0368** 

#### **Product Data:**

**Product SKU:** RPES0368 **Size:** 10μg

Species: Human Expression host: HEK293 Cells

**Uniprot:** NP\_055508.3

### **Protein Information:**

Molecular Mass: 105 kDa

AP Molecular Mass: 12030 kDa

Tag: N-Fc

**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 proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°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 sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

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

Application:

**Synonyms:** ECE2;hCG 2022032;KIAA0604;MGC17664;MGC2408;MGC78487

## Immunogen Information:

Sequence: Gly 199-Trp 883

## **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 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 to endothelin. It is involved in the processing of various neuroendocrine peptides, including neurotensin, angiotensin I, substance P, proenkephalin-derived peptides, and prodynorphinderived 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.