

Recombinant Protein Technical Manual Recombinant Human ECE-2 Protein (His Tag)

RPES0350

Product Data:

Product SKU: RPES0350

Species: Human

Size: 10µg

Expression host: HEK293 Cells

Uniprot: NP_055508.3

Drat	ain	Intorn	nation:

Molecular Mass:	80.2 kDa		
AP Molecular Mass:	12025 kDa		
Tag:	N-His		
Bio-activity:			
Purity:	> 93 % as determined by reducing SDS-PAGE.		
Endotoxin:	< 1.0 EU per μg 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 PBS, pH 7.4		
Reconstitution:	Please refer to the printed manual for detailed information.		
Application:			
Synonyms:	ECE2;hCG_2022032;KIAA0604;MGC17664;MGC2408;MGC78487		

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 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.