

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ECE-1 in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 303913
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human ECE-1 Gln90-Trp770 Accession # P42892
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Intracellular Staining by Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	MCF-7 human breast cancer cell line fixed with paraformaldehyde and permeabilized with saponin

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### BACKGROUND

Endothelin-converting Enzyme 1 (ECE-1) is a zinc protease of the neprilysin (NEP) family, which also includes ECE-2, PEX, XCE, DINE, Kell and several NEP-like proteins (1). ECE-1 is a type II transmembrane protein with a short cytoplasmic tail and a large ectodomain. Four alternatively spliced isoforms differ in their cytoplasmic tail (2, 3). In addition to big endothelin-1, ECE-1 cleaves a variety of bioactive peptides such as bradykinin, neurotensin, angiotensin I, and substance P (1). Together with ECE-2, it is also involved in degradation of β-amyloid peptide (4). The ectodomain of human ECE-1, which is common to all isoforms, was expressed with an N-terminal His tag and purified.

#### References:

1. Turner, A.J. *et al.* (2001) *BioEssays* **23**:261.
2. Valdennaire, O. *et al.* (1999) *Eur. J. Biochem.* **264**:341.
3. Schweizer, A. *et al.* (1997) *Biochem. J.* **328**:871.
4. Eckman, E.A. *et al.* (2003) *J. Biol. Chem.* **278**:2081.

#### PRODUCT SPECIFIC NOTICES

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