

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                                                                                             |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human ECE-2 in direct ELISAs and Western blots. In Western blots, 30% cross-reactivity with recombinant human (rh) ECE-1 and no cross-reactivity with rhKELL is observed. |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Rat IgG <sub>2A</sub> Clone # 233914                                                                                                                                   |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                                                                                                        |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human ECE-2<br>Val104-Leu787<br>Accession # O60344                                                                                |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                   |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                                                                      |
| *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>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## 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> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

ECE-2 is a zinc protease of the neprilysin (NEP) family, which also includes ECE-1, PEX, XCE, DINE, Kell and several NEP-like proteins (1). ECE-2 is a type II transmembrane protein with a short cytoplasmic tail and a large ectodomain. Three alternatively spliced forms differ in their cytoplasmic tail (2). In addition to big endothelin-1, ECE-2 cleaves a variety of bioactive peptides such as bradykinin, neurotensin, angiotensin I, substance P, dynorphin B, proenkephalin-derived peptides such as peptide E, BAM 22 and BAM18, and PEN-LEN, an endogenous inhibitor of prohormone convertase 1 (3). Together with ECE-1, it is also involved in degradation of  $\beta$ -amyloid peptide (4). The ectodomain of human ECE-2 was expressed with an N-terminal His tag and purified.

## PRODUCT SPECIFIC NOTICES

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