

DESCRIPTION

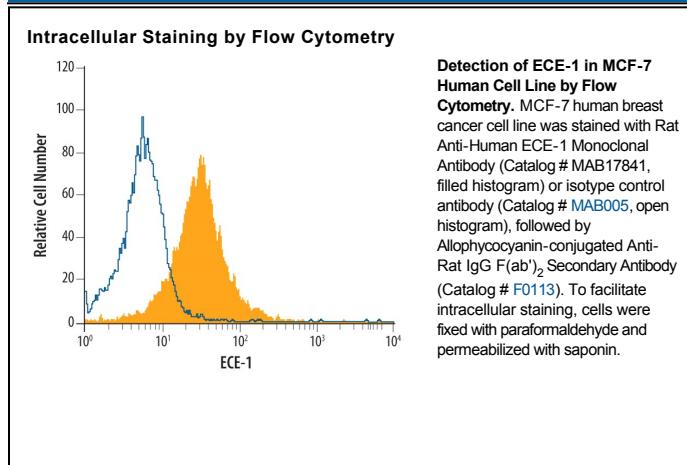
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human ECE-1 in direct ELISAs. |
| Source | Monoclonal Rat IgG ₁ Clone # 303913 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human ECE-1 Gln90-Trp770 Accession # P42892 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

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.

| | Recommended Concentration | Sample |
|---|--|---------------|
| Intracellular Staining by Flow Cytometry | 0.25 µg/10 ⁶ cells | See Below |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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. Valdenaire, 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.