

## Product Information

### Anti-CT-Pro ET1 (Internal) antibody produced in rabbit affinity isolated antibody

Catalog Number **SAB4200664**

#### Product Description

Anti-CT-Pro ET1 (internal) is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal region of CT-Pro ET1, conjugated to KLH. The immunogen corresponds to human Endothelin-1 (GeneID: 1906). The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-CT-Pro ET1 (internal) recognizes human Endothelin-1. The antibody may be used in various immunochemical techniques including immunoblotting using C-terminal region of human recombinant CT-Pro ET1 peptide (~5 kDa), immunohistochemistry and immunofluorescence. Detection of the CT-Pro ET1 band by Immunoblotting is specifically inhibited by the immunizing peptide.

Endothelin-1 (ET-1), also known as Preproendothelin-1 (PPET1) is a major endothelium-derived contracting factor. Endothelin-1 belongs to the Endothelin family of potent vasoconstrictor peptides. It consists of three structurally-related members, distinct in their pharmacological activities and distribution ET-1, ET-2 and ET-3.

Preproendothelin-1 is subjected to a series of proteolytic cleavages in the plasma, resulting in several peptides. ET-1 peptide is a result of two proteolytic steps. First, the 212 amino acid Preproendothelin-1 is cleaved into a 38 amino acid peptide called BigET-1. Then, a second cleavage mediated by endothelin-converting enzymes (ECE) generates the 21 amino acid ET-1 active peptide.<sup>1-5</sup> C-terminal endothelin 1 (CT-pro-ET1) is a 44 amino acid peptide.<sup>6-7</sup>

ET-1 plays an important role in various tissues. It involve in the homeostasis of the circulatory system and in pathogenesis of cardiovascular diseases. Indeed, circulating ET-1 levels are increased in most cardiovascular diseases.<sup>1-5</sup> The active ET-1 peptide and CT-pro-ET1 peptide plasma levels are elevated in heart failure and after acute myocardial infarction (AMI), and give prognostic information on mortality. CT-proET-1 may represent a clinically useful marker of

prognosis after AMI.<sup>7</sup> Nevertheless, in hemodialysis patients, CT-pro-ET1 concentrations were not associated at all with mortality.<sup>6</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

**Immunoblotting:** a working concentration of 0.5-1 µg/mL is recommended using C-terminal region of human recombinant CT-Pro ET1 peptide (amino acid 168-212).

**Immunofluorescence:** a working concentration of 5-10 µg/mL is recommended using A549 cells.

**Immunohistochemistry:** a working dilution of 20 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded human placenta sections.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

## References

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4. Yanagisawa, M., and Masaki, T., *Biochem. Pharmacol.*, **38**, 1877-1883 (1989).
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6. Artunc, F., et al., *PLoS One*, **9**, e86148 (2014).
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