

Product Information

Anti-Copeptin antibody produced in rabbit affinity isolated antibody

Catalog Number **SAB4200663**

Product Description

Anti-Copeptin is produced in rabbit using as immunogen a synthetic peptide corresponding to the C-terminal region of human Copeptin (GeneID: 551), conjugated to KLH. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Copeptin recognizes human Copeptin. The antibody may be used in various immunochemical techniques including immunohistochemistry, immunoblotting, immunoprecipitation and ELISA. Detection of the Copeptin band by immunoblotting is specifically inhibited by the immunizing peptide.

Vasopressin-neurophysin 2-copeptin, also known as AVP (Arginine vasopressin) or pre-proAVP, is one of the main hormones of the axis hypothalamic-pituitary-adrenal. It is cleaved into 3 chains: Arg-vasopressin, Neurophysin-2 and Copeptin. Copeptin is 39 amino-acids peptide glycopeptide, located at the C-terminal part of the pre-proAVP. It is secreted into the systemic circulation from the posterior pituitary gland and is stable in the plasma. Copeptin concentration directly reflects AVP activation and can therefore be used as a biomarker of the AVP system. Copeptin levels are strongly associated with stroke, sudden death, cardiovascular events, and mortality in patients. It can also be used as a biomarker for a list of illnesses, such as acute myocardial infarction (AMI), hyponatremia, sepsis, septic shock, infections of lower respiratory tract, acute dyspnea, vasodilatory shock, diabetes insipidus, autosomal dominant polycystic kidney disease (ADPKD), diabetes mellitus, metabolic syndrome, intracerebral hemorrhage, pulmonary arterial hypertension (PAH) and head injury.¹⁻⁴

Reagent

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

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

Immunohistochemistry: a working antibody concentration of 20 µg/mL is recommended using mouse or human Kidney sections.

Immunoblotting: a working concentration of 0.25-0.5 µg/mL is recommended using recombinant human Copeptin trifluoroacetate (C8749).

Immunoprecipitation: a working amount of 5-10 µg is recommended using recombinant human Copeptin trifluoroacetate (C8749).

Indirect ELISA: a working concentration of 0.25-0.5 µg/mL is recommended using human Copeptin trifluoroacetate (C8749) for coating.

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

References

1. Dobsa L. and Edozien KC., *Biochem Med (Zagreb)*, **23**, 172-190 (2013).
2. Artunc F., et al., *PLoS One*, **9**, e86148 (2014).
3. Fenske W., et al., *J Am Soc Nephrol.*, **22**, 782–790 (2011).
4. Nickel NP., et al., *Respir Res.*, **14**, 130 (2013).

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