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Technical Information about 2'-AHC-c-diAMP-Agarose

Gel for affinity chromatography of c-diAMP-responsive proteins

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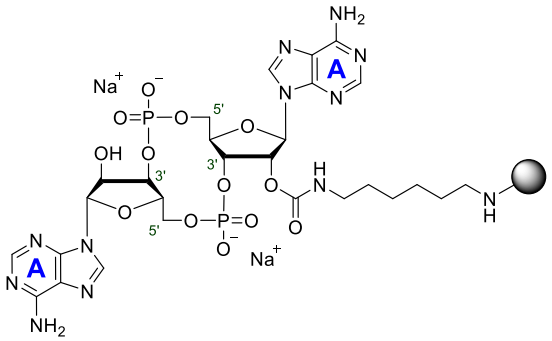

Abbreviation: **2'-AHC-c-diAMP-Agarose**

BIOLOG Cat. No.: A 183

Description: In 2'-AHC-c-diAMP-Agarose 2'-AHC-c-diAMP (2'-O-(6-Aminohexylcarbamoyl)-cyclic diadenosine monophosphate, Cat. No. A 182) has been immobilized as an affinity ligand.

Properties: 2'-AHC-c-diAMP-Agarose can be used for affinity chromatography of c-diAMP-responsive proteins. c-diAMP (Cat. No. C 088) is a purine-based signalling nucleotide in bacteria.

Specification: Suspension in 30 mM Na_2HPO_4 buffer (pH 7). Ligand density: approximately 1 µmol/ml of settled gel. UV: λ_{max} 259 nm/suspension in glycol.

Stability and Storage: 2'-AHC-c-diAMP-Agarose has sufficient stability for chromatography at ambient temperature. Nevertheless, for longer storage periods the gel should be kept in the refrigerator at + 4 - + 8 degrees Celsius. Storage buffer should contain azide for prevention of microbial growth.

Chromatography: After equilibration with about 10 column volumes of starting buffer the affinity column is loaded with the protein solution. In order to elute proteins unspecifically bound, the resin is washed, e.g. with 10 mM GTP, 1 mM ATP, 0.25 mM cAMP and/or 0.25 mM cGMP. Elution of c-diAMP-binding proteins can be performed with free c-diAMP (e.g. 100 - 500 µM).
An alternative protocol for elution using 5 mL of 9 M urea in PBS containing 1% (vol/vol) Triton X-100 can be found in Bai et al. (2014).
Suitable buffer systems for your special application have to be tested.
Regeneration of the agarose may be achievable by incubation with 8 M urea and subsequent washing with a suitable buffer.

Toxicity and Safety: Please keep in mind that the *in vivo* properties of this product are not sufficiently characterized up to now. Avoid skin contact or ingestion and allow only trained personnel to work with it.
Our products are designed, developed and sold for research purposes only. They are intended for *in vitro* and non-human *in vivo* laboratory applications. Any other use requires approval of health authorities.
Not for drug, household or related uses!

Selected References for 2'-AHC-c-diAMP-Agarose:

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Reference for the related product 2'-AHC-c-diGMP-Agarose (Cat. No. A 153):

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BIOLOG Life Science Institute, Bremen, Germany Phone: 49 (0) 421 591355 Fax: 49 (0) 421 5979713 e-mail: service@biolog.de

Selected References for the Bacterial Second Messenger c-diAMP:

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BIOLOG Life Science Institute, Bremen, Germany Phone: 49 (0) 421 591355 Fax: 49 (0) 421 5979713 e-mail: service@biolog.de