

Product datasheet

AICAR (Acadesine/AICA riboside) ab120358

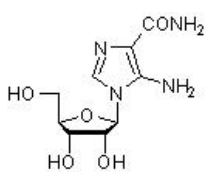
4 References 画像数 1

製品の概要

|                |   |
|----------------|---|
| <b>製品名</b>     | AICAR (Acadesine/AICA riboside)   |
| <b>製品の詳細</b>   | Cell-permeable activator of AMP-activated protein kinase  |
| <b>生理活性の詳細</b> | Cell-permeable activator of AMP-activated protein kinase. Is taken up into cells by adenosine transporters and phosphorylated by adenosine kinase to the active nucleotide ZMP (5-aminoimidazole-4-carboxamide ribonucleoside), which mimics effects of AMP on the AMPK system. Active <i>in vivo</i> and <i>in vitro</i> . |
| <b>精製度</b>     | > 98%   |

Also available in simple stock solutions ([ab146713](#)) - add 1 ml of water to get an exact, ready-to-use concentration.

製品の特性

|                     |  |
|---------------------|--|
| <b>体系名</b>          | 5-Amino-1-[(2R,3S,4R,5R)-tetrahydro-3,4-dihydroxy-5-(hydroxymethyl)furan-2-yl]-1H-imidazole-4-carboxamide  |
| <b>分子量</b>          | 258.23   |
| <b>構造式</b>          |   |
| <b>分子式</b>          | C <sub>9</sub> H <sub>14</sub> N <sub>4</sub> O <sub>5</sub>   |
| <b>CAS 番号</b>       | 2627-69-2  |
| <b>PubChem 登録番号</b> | 17513  |
| <b>保存方法</b>         | Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.   |
| <b>溶解性</b>          | Soluble in water to 50 mM and in DMSO to 100 mM (with heating)   |
| <b>使用に関する注意</b>     | Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. |

Need more advice on solubility, usage and handling? Please visit our [frequently asked questions](#)

(FAQ) page for more details.

## SMILES 線形表記

NC(=O)c2ncn([C@@H]1O[C@H](CO)[C@H](O)[C@@H]1O)c2N

## 由来

Synthetic

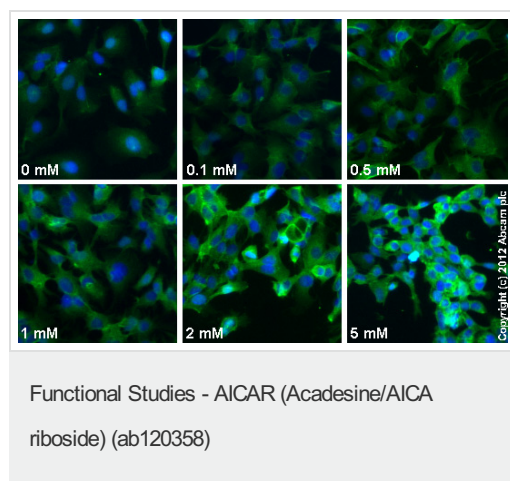
## アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab120358** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| アプリケーション           | Abreviews | 特記事項                                     |
|--------------------|-----------|--|
| Functional Studies |           | Use at an assay dependent concentration. |

## 画像



[ab39400](#) staining AMPK alpha 1 (phospho S496) in HepG2 cells treated with AICAR (ab120358), by ICC/IF. Increase in AMPK alpha 1 (phospho S496) expression correlates with increased concentration of AICAR, as described in literature.

The cells were incubated at 37°C for 1h in media containing different concentrations of ab120358 (AICAR) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature.

Staining of the treated cells with [ab39400](#) (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody ([ab96899](#)) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"

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