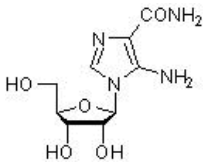
abcam

Product datasheet

AICAR (Acadesine/AICA riboside), AMPK activator ab120358

16 References 画像数 3

製品の概要

製品名	AICAR (Acadesine/AICA riboside), AMPK activator
製品の詳細	Cell-permeable activator of AMP-activated protein kinase
生理活性の詳細	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 *in vivo* and *in vitro*. Also available in simple stock solutions (**ab146713**) - add 1 ml of water to get an exact, ready-to-use concentration.
CAS 番号	2627-69-2
構造式	

製品の特性

体系名	5-Amino-1-[(2*R*,3*S*,4*R*,5*R*)-tetrahydro-3,4-dihydroxy-5-(hydroxymethyl)furan-2-yl]-1*H*-imidazole-4-carboxamide
分子量	258.23
分子式	$C_9H_{14}N_4O_5$
PubChem 登録番号	17513
保存方法	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
溶解性	Soluble in water to 50 mM and in DMSO to 100 mM (with heating)
使用に関する注意	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. Refer to SDS for further information

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

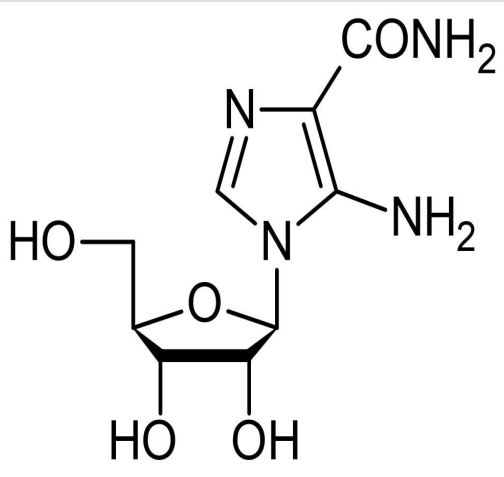
アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab120358の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

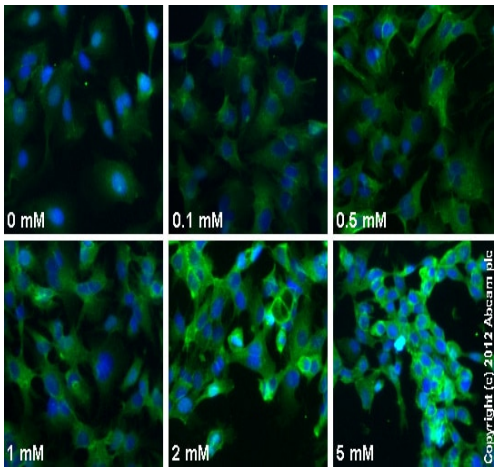
アプリケーション	Abreviews	特記事項
Functional Studies		Use at an assay dependent concentration.

画像



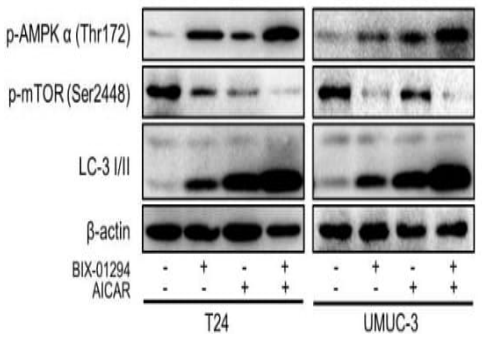
Chemical Structure - AICAR (Acadesine/AICA riboside), AMPK activator (ab120358)

2D chemical structure image of ab120358, AICAR (Acadesine/AICA riboside), AMPK activator



Functional Studies - AICAR (Acadesine/AICA riboside), AMPK activator (ab120358)

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.



Western blot - AICAR (Acadesine/AICA riboside), AMPK activator (ab120358)

T24 (transitional cell carcinoma) and UMUC-3 cells were pre-incubated with G9a activator AICAR (1mM, ab120358) for 4 h and then treated with BIX-01294 (1.5 µM) for 24h. The levels of p-AMPKα, p-mTOR and LC-3 I/II was examined.

Credit: Li F et al. PLoS One. 2015; 10(9): e0138390. doi: 10.1371/journal.pone.0138390

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