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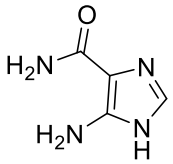
fine chemicals

PRODUCT DATA SHEET

5-Aminoimidazole-4-carboxamide

Code No.: **BIA-A2590**

Pack sizes: **5 mg, 25 mg**



Synonyms :

Specifications

CAS #	:	**360-97-4**
Molecular Formula	:	**$C_4H_6N_4O$**
Molecular Weight	:	**126.1**
Source	:	**Synthetic**
Appearance	:	**Grey solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

5-Aminoimidazole-4-carboxamide is a ubiquitous metabolite and an intermediate in purine biosynthesis of compounds such as acadesine and gancyclovir. Derivatives of 5-aminoimidazole-4-carboxamide have broad biological effects as antitumor, antiviral, antidiabetic and anti-inflammatory agents. 5-Aminoimidazole-4-carboxamide derivatives activate AMP kinase.

References

1. Controls of nuclear factor-kappa B signaling activity by 5'-AMP-activated protein kinase activation With examples in human bladder cancer cells. Choi B-H. et al. Int Neurourol J 2016, 20, 182.
2. AMP-activated protein kinase and type 2 diabetes. Musi N. et al. Curr Med Chem 2006, 13, 583.
3. The AMPK agonist 5-aminoimidazole-4-carboxamide ribonucleotide (AICAR), but not metformin, prevents inflammation-associated cachectic muscle wasting. Hall D.T. et al. EMBO Mol Med 2018, 10, e8307.

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