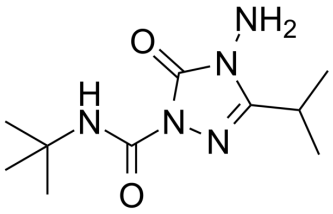
Amicarbazone

Cat. No.:	HY-17513
CAS No.:	129909-90-6
Molecular Formula:	$C_{10}H_{19}N_5O_2$
Molecular Weight:	241.29
Target:	Others
Pathway:	Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

H_2O : 1 mg/mL (4.14 mM; ultrasonic and heat to 50°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.1444 mL	20.7220 mL	41.4439 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Amicarbazone(BAY-MKH3586; BAY314666) is a potent inhibitor of photosynthetic electron transport via binding to the Qb domain of photosystem II (PSII); herbicide with a broad spectrum of weed control.IC50 value:Target: PSII inhibitorThe phenotypic responses of sensitive plants exposed to amicarbazone include chlorosis, stunted growth, tissue necrosis, and death. Its efficacy as both a foliar- and root-applied herbicide suggests that absorption and translocation of this compound is very rapid. As a result, its efficacy is susceptible to the most common form of resistance to PSII inhibitors. Nonetheless, amicarbazone has a good selectivity profile and is a more potent herbicide than atrazine, which enables its use at lower rates than those of traditional photosynthetic inhibitors.

REFERENCES

[1]. Franck E. Dayan, et al. Amicarbazone, a New Photosystem II Inhibitor . ed Science 57(6):579-583. 2009

Caution: Product has not been fully validated for medical applications. For research use only.

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