

Product Data Sheet

Product Name: Benzolamide

Cat. No.: GC62864

Chemical Properties

Cas. No. 3368-13-6

Formula $C_8H_8N_4O_4S_3$ M.Wt 320.37

Solubility DMSO : 250 mg/mL (780.35 mM; Storage 4°C, protect from light
Need ultrasonic)

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

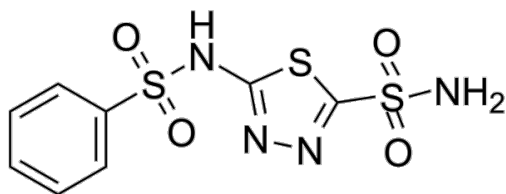
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

Benzolamide (CL11366) is a potent carbonic anhydrase (CA) inhibitor, with K_i s of 15 nM, 9 nM, 94 nM and 78 nM for hCA I, hCA II, EcoCA γ and VchCA γ , respectively. Benzolamide also inhibits CAS3, with a K_i of 54 nM. Benzolamide can be used for the research of glaucoma and seizures[1][2][3].

Benzolamide inhibits hCA I, hCA II, EcoCA γ and VchCA γ , with K_i s of 15 nM, 9 nM, 94 nM and 78 nM, respectively[1]. Benzolamide shows selectivity for CAS3 (K_i =54 nM) over CAS1 (K_i =2115 nM) and CAS2 (K_i =410 nM)[2].

Benzolamide (90 μ mol/kg; i.p.) decreases brain pH and suppresses electrographic post-asphyxia seizures in rats[3].

[1]. Prete SD, et, al. Escherichia coli γ -carbonic anhydrase: characterisation and effects of simple aromatic/heterocyclic sulphonamide inhibitors. J Enzyme Inhib Med Chem. 2020 Dec;35(1):1545-

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

1554.

[2]. Vullo D, et, al. Sulfonamide Inhibition Studies of the β -Class Carbonic Anhydrase CAS3 from the Filamentous Ascomycete *Sordaria macrospora*. *Molecules*. 2020 Feb 25;25(5):1036.

[3]. Pospelov AS, et, al. Carbonic anhydrase inhibitors suppress seizures in a rat model of birth asphyxia. *Epilepsia*. 2021 Jun 27.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA