

# Product Data Sheet

# Inhibitors • Screening Libraries

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Proteins

## Carbonic anhydrase, Bovine erythrocytes

Cat. No.:	HY-P1775	
CAS No.:	9001-03-0	
Target:	Carbonic Anhydrase	
Pathway:	Metabolic Enzyme/Protease	Carbonic anhydrase, Bovine erythrocytes
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

### SOLVENT & SOLUBILITY

In Vitro	$H_2O: \ge 50 \text{ mg/mL}$
	* "≥" means soluble, but saturation unknown.

BIOLOGICAL ACTIVITY			
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Description	Carbonic anhydrase, Bovine erythrocytes (EC 4.2.1.1) is ubiquitous zinc-containing metalloenzyme present in prokaryotes and eukaryotes. Carbonic anhydrase can catalyze reversible conversion of carbon dioxide to bicarbonate and protons. Carbonic anhydrase can be used for the research of cancer, glaucoma, obesity and epilepsy <sup>[1][2]</sup> .		
In Vitro	Applied to CO <sub>2</sub> determination in blood,elimination of CO <sub>2</sub> in reagents for acidity testing,carboxy group transfers,reduction reactions.		
	Solution preparation Dissolve lyophilized powder at a concentration of 0.1 mg/mL in ice cold water. Store in ice bath prior to use. Immediately prior to use dilute suspensions or lyophilized materials to a concentration of approximately 0.01 mg/mL in ice cold water.		
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

### REFERENCES

[1]. Kanchan Aggarwal, et al. In Situ Photoregulation of Carbonic Anhydrase Activity Using Azobenzenesulfonamides. Biochemistry. 2019 Jan 8;58(1):48-53.

[2]. Vladimir Amirkhanov, et al. Pharmacophores Modeling in Terms of Prediction of Theoretical Physicochemical Properties and Verification by EXPERIMENTAL correlations of Carbacylamidophosphates (CAPh) and Sulfanylamidophosphates (SAPh) Tested as New Carbonic Anhydrase Inhibitors. Mini Rev Med Chem. 2019;19(12):1015-1027.

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

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