

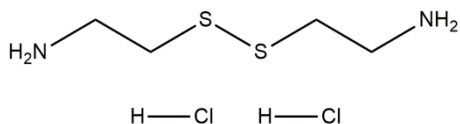
Cystamine dihydrochloride

01/20

ALTERNATE NAMES: 2,2'-Disulfanediyldiethanamine dihydrochloride; Ethanamine, 2,2'-dithiobis-, dihydrochloride; Cystamin dihydrochloride; 2-(2-aminoethylsulfanyl)ethanamine, dihydrochloride; 2,2'-Diaminodiethyl disulfide dihydrochloride

CATALOG #: B2982-1G 1 g
B2982-5G 5 g

STRUCTURE:



MOLECULAR FORMULA: $C_4H_{14}Cl_2N_2S_2$

MOLECULAR WEIGHT: 225.2

CAS NUMBER: 56-17-7

APPEARANCE: Solid

PURITY: 97%

SOLUBILITY: ~5 mg/ml in DMSO
~10 mg/ml in PBS, pH 7.2

DESCRIPTION: Cystamine is an organic disulfide that inhibits transglutaminase (TGM2) with 44% inhibition observed at a concentration of 2.5 mM. It shows neuroprotective activity in a mouse model of Huntington's disease. It has an anti-inflammatory effect and reduces severity of colitis in a rat model of inflammatory bowel disease.

STORAGE TEMPERATURE: -20°C. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Smethurst, P.A., and Griffin, M. Measurement of tissue transglutaminase activity in a permeabilized cell system: Its regulation by Ca^{2+} and nucleotides. *Biochem. J.* 313(pt 3), 803-808 (1996).
2. Dedeoglou, A., Kubilus, J.K., Jeitner, T.M., et al. Therapeutic effects of cystamine in a murine model of Huntington's disease. *J. Neurosci.* 22(20), 8942-8950 (2002).
3. Elli, L., Ciulla, M.M., Busca, G., et al. Beneficial effects of treatment with transglutaminase inhibitor cystamine on the severity of inflammation in a rat model of inflammatory bowel disease. *Lab. Invest.* 91(3), 452-461 (2011).

RELATED PRODUCTS:

NQTrp (Cat. No. B2981)
GSK-2814338 (Cat. No. B2426)
Thiamet G (Cat. No. B2959)
BI-409306 (Cat. No. B2377)
PLX5622 (free base) (Cat. No. B2965)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*