PRODUCT INFORMATION

2-Guanidinoethylmercaptosuccinic Acid
Item No. 19354

CAS Registry No.: 77482-44-1
Formal Name: 2-[[2-(aminoiminomethyl)amino]ethyl][thio]-butanedioic acid
Synonym: GEMSA
MF: C7H13N3O4S
FW: 235.3
Purity: ≥98%
Supplied as: A solid
Storage: 4°C
Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

2-Guanidinoethylmercaptosuccinic acid (GEMSA) is supplied as a solid. A stock solution may be made by dissolving the GEMSA in the solvent of choice. GEMSA is soluble in water at a concentration of approximately 50 mM.

Description

Enkephalin convertase, also known as carboxypeptidase E, removes C-terminal residues during the processing of propeptides, including enkephalin and proinsulin. GEMSA is a potent inhibitor of enkephalin convertase (K_i = 8.8 nM) that is functional in vivo.1,2 It is a peptidomimetic inhibitor, occupying the specificity pocket of the enzyme.3 GEMSA can also inhibit other carboxypeptidases, including thrombin-activatable fibrinolysis inhibitor.4,5

References