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: C_{7}H_{13}N_{3}O_{4}S
FW: 235.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2-Guanidinoethylmercaptosuccinic acid (GEMSA) is supplied as a solid. A stock solution may be made by dissolving the GEMSA in water. We do not recommend storing the aqueous solution for more than one day.

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.\textsuperscript{1,2} It is a peptidomimetic inhibitor, occupying the specificity pocket of the enzyme.\textsuperscript{3} GEMSA can also inhibit other carboxypeptidases, including thrombin-activatable fibrinolysis inhibitor.\textsuperscript{4,5}

References