

Product Data Sheet

Product Name: EPO mimetic peptide-1 acetate

Cat. No.: GC81644

Chemical Properties

Cas. No.

Formula $C_{94}H_{134}N_{26}O_{25}S_2 \cdot xC_2H_4O_2$ M.Wt 2092.36

Solubility DMSO: 50 mg/mL (Need ultrasonic) Storage Sealed storage, away from moisture

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.

Structure

Gly-Gly-Thr-Tyr-Ser-Cys-His-Phe-Gly-
Pro-Leu-Thr-Trp-Val-Cys-Lys-Pro-Gln-
Gly-Gly-NH₂ (disulfide bridge:Cys6-
Cys15) (acetate salt)

Background

EPO mimetic peptide-1 (EMP-1) acetate, a 20 amino acid peptide. EPO mimetic peptide-1 acetate stimulates cell proliferation, affects cell cycle and induces the production of reticulocytes in vivo [1].

In Vivo, EPO mimetic peptide-1 (1-2 mg; once) acetate induces the production of reticulocytes over

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

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the background of endogenous in normal, untreated mice containing endogenous basal levels of EPO mice^[1].

In Vitro, EPO mimetic peptide-1 acetate shows inhibition of tracer 125I-labeled EPO binding with an IC₅₀ value of 0.2 μ M^[1]. EPO mimetic peptide-1 (0-50 mM; 48 h) acetate stimulates proliferation of both TF-1 and B6Sut cells in a dose-dependent manner^[1]. EPO mimetic peptide-1 (1 and 10 μ M) acetate promotes erythroid colony formation from human peripheral blood and murine bone marrow^[1]. EPO mimetic peptide-1 (10 μ M; 10 min) acetate induces the phosphorylation of proteins^[1]. EPO mimetic peptide-1 (1 and 10 μ M; 0-18 h) acetate affects cell cycle^[1].

References:

[1]. Wrighton NC, et al. Small peptides as potent mimetics of the protein hormone erythropoietin. Science. 1996 Jul 26;273(5274):458-64.

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