
Product Data Sheet

Product Name: S-methyl-KE-298 (M-2)

Cat. No.: GC31734

Chemical Properties

Cas. No. 143584-75-2

SMILES CSCC(C(O)=O)CC(C1=CC=C(C)C=C1)=OFormula $C_{13}H_{16}O_3S$

M.Wt 252.33

Solubility DMSO : 100 mg/mL (396.31 mM; Need ultrasonic) Storage Store at -20°C

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 **Background**

S-methyl-KE-298 is an active metabolite of KE-298. KE-298 inhibits matrix metalloproteinase (MMP-1) production from rheumatoid arthritis (RA) synovial cells.

S-methyl-KE-298 is a methyl conjugate of deacetyl-KE-298 is plasma[1]. In vitro protein binding of KE-298 and its plasma metabolites, deacetyl-KE-298 (M-1) and S-methyl-KE-298 (M-2), is high in rat (>97%), dog (>89%) and human plasma (>99%), respectively[2]. KE-298 blocks this IL-1 β -induced pro-MMP-2 activation and MT1-MMP expression, but does not affect IL-1 β -induced tissue inhibitor of metalloproteinase-2 (TIMP-2) secretion from rheumatoid synovial cells. KE-298 inhibits MMP-1 production from rheumatoid arthritis (RA) synovial cells by affecting a transcription factor, AP-1. KE-298 inhibits the basal levels of MT1-MMP expression of unstimulated rheumatoid synovial cells[3].

[1]. Yoshida H, et al. Identification of metabolites of KE-298, a new antirheumatic drug, and its physiological properties in rats. Biol Pharm Bull. 1996 Mar;19(3):424-9. [2]. Endo H, et al. Stereoselectivity and species difference in plasma protein binding of KE-298 and its metabolites. Biol Pharm Bull. 2001 Jul;24(7):800-5. [3]. Honda S, et al. Expression of

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

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membrane-type 1 matrix metalloproteinase in rheumatoid synovial cells. Clin Exp Immunol. 2001 Oct;126(1):131-6.

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