ALPHA DIAGNOSTIC INTERNATIONAL

Product Data Sheet

Cat# **SP-51961-1**

Description: Ac-S-D-K-P* [Ac-Ser-Asp-Lys-Pro-OH; MW: 487.51]

Size: 5 mg

Purity: >95%

Store: Desiccated at -20oC.

The tetrapeptide acetyl-N-Ser-Asp-Lys-Pro (AcSDKP), purified from bone marrow and present in blood at nanomolar concentrations, is recognized as a physiologic regulator of hematopoiesis. It inhibits the proliferation of normal hematopoietic stem cells and committed progenitors in vivo as well as in vitro. It is degraded mainly by angiotensin-converting enzyme (ACE). It is cleared almost exclusively by ACE, and specifically by the N-domain active site of this enzyme. It has the ability to limit the proliferation of blood stem cells by inhibiting cell cycle entry and therefore belongs to the family of negative regulators of hematopoiesis. It protects the stem cell compartment from the toxicity of anticancer drugs and irradiation and consequently contributes to a reduction in marrow failure.

It has been reported that AcSDKP is a mediator of angiogenesis, as measured by its ability to modulate endothelial cell function in vitro and angiogenesis in vivo.It is involved in angiogenesis and regulation of the immune response by blocking the proliferation of lymphocytes. Experimental studies have shown that it inhibits not only hematopoietic cell proliferation but also fibroblast proliferation and collagen synthesis in vitro.

References:

Journal of Cell Science 113, 113-121 (2000); Clinical and Experimental Pharmacology and Physiology Volume 40, 8, 535–541(2013); Blood 2003 101: 3014-3020

Related items:

Catalog#	ProdDescription
SP-51961-1	Ac-S-D-K-P* [Ac-Ser-Asp-Lys-Pro-OH; MW: 487.51]
SP-51978-25	Ac-YVAD-pNA* [Ac-Tyr-Val-Ala-Asp-pNA; MW:628.6]
SP-51999-1	Ac-LEHD* [Ac-Leu-Glu-His-Asp-pNA:, MW 674.7]
SP-52000-25	Ac-VEID-pNA* [Ac-Val-Glu-Ile-Asp-pNA; MW:636.6]
SP-52001-25	Ac-IETD-pNA [Ac-Ile-Glu-Thr-Asp-pNA; MW:638.6]
SP-52003-25	Ac-GPK(Ac)-Pna [Ac-Gly-Pro-Lys(Ac)pNA; MW:504.5]
SP-52004-25	Ac-GPK-pNA [Ac-Gly-Pro-Lys-pNA; MW: 462.5]

SP-51961-1 130109P

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