PRODUCT INFORMATION



Z-Asp-CH2-DCB

Item No. 15143

CAS Registry No.:	153088-73-4		
Formal Name:	(3S)-4-carboxy-2-oxo-3-		
	[[(phenylmethoxy)carbonyl]amino]butyl ester 2,6-dichloro-benzoic acid		0
Synonym:	Z-Asp-2,6-Dichlorobenzoyloxymethyl	CI CI H	
	Ketone	L Ĭ .	
MF:	$C_{20}H_{17}CI_2NO_7$		
FW:	454.3	l j ö	
Purity:	≥98%	CI	0 ^{//} OH
Supplied as:	A crystalline solid		
Storage:	-20°C		
Stability:	≥4 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis			

Laboratory Procedures

Z-Asp-CH2-DCB is supplied as a crystalline solid. A stock solution may be made by dissolving the Z-Asp-CH2-DCB in the solvent of choice, which should be purged with an inert gas. Z-Asp-CH2-DCB is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Z-Asp-CH2-DCB in ethanol is approximately 33 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Z-Asp-CH2-DCB is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Z-Asp-CH2-DCB should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Z-Asp-CH2-DCB has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Z-Asp-CH2-DCB is a peptide originally synthesized for its ability to inactivate the interleukin-1βconverting enzyme, which is the homolog of the C. elegans positive regulator of apoptosis CED-3.¹⁻² Z-Asp-CH2-DCB has been shown to block apoptosis by nonselectively inhibiting caspase activity.² At 1-100 μ M, it can dose-dependently block the production of IL-1 β , TNF- α , IL-6, and IFN- γ by human peripheral blood mononuclear cells as well as inhibit T cell proliferation.³

References

- 1. Dolle, R.E., Hoyer, D., Prasad, C.V.C., et al. P1 aspartate-based peptide a-((2,6dichlorobenzoyl)oxy)methyl ketones as potent time-dependent inhibitors of interleukin-1b-converting enzyme. J. Med. Chem. 37(5), 563-564 (1994).
- 2. Mashima, T., Naito, M., Kataoka, S., et al. Aspartate-based inhibitor of interleukin-1-b-converting enzyme prevents antitumor agent-induced apoptosis in human myeloid leukemia U937 cells. Biochem. Biophys. Res. Commun. 209(3), 907-915 (1995).
- 3. Krakauer, T. Caspase inhibitors attenuate superantigen-induced inflammatory cytokines, chemokines, and T-cell proliferation. Clin. Diagn. Lab. Immunol. 11(3), 621-624 (2004).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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