

PRODUCT INFORMATION



NF-κB Inhibitor (trifluoroacetate salt)

Item No. 17493

Formal Name:	L-alanyl-L-alanyl-L-valyl-L-alanyl-L-leucyl-L-leucyl-L-prolyl-L-alanyl-L-valyl-L-leucyl-L-leucyl-L-alanyl-L-leucyl-L-leucyl-L-alanyl-L-prolyl-L-valyl-L-glutamyl-L-arginyl-L-lysyl-L-arginyl-L-glutamyl-L-lysyl-L-leucyl-L-methionyl-L-proline, trifluoroacetate salt	-Ala—Ala—Val—Ala—Leu—Leu—Pro—Ala—Val—Leu—Ala—Leu—Leu—Ala—Pro—Val—Gln—Arg—Lys—Arg—Gln—Lys—Leu—Met—Pro—OH
Synonym:	SN50 Peptide	
MF:	$C_{129}H_{230}N_{36}O_{29}S \cdot XCF_3COOH$	$\cdot XCF_3COOH$
FW:	2,781.5	
Purity:	≥95%	
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

NF-κB inhibitor (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the NF-κB inhibitor (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. NF-κB inhibitor (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of NF-κB inhibitor (trifluoroacetate salt) in ethanol is approximately 50 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of NF-κB inhibitor (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of NF-κB inhibitor (trifluoroacetate salt) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

NF-κB inhibitor is a synthetic peptide corresponding to the nuclear localization sequence of NF-κB p105 subunit (also known as p50) appended to a hydrophobic sequence to facilitate import into living cells.¹ It blocks the nuclear import of p105 in cells treated with activators of NF-κB signaling, including LPS and TNF-α.¹ In this way, NF-κB inhibitor blocks gene expression that is regulated by NF-κB.^{2,3} This peptide is commonly used to evaluate the role of NF-κB signaling in cellular responses.^{4,5}

References

1. Lin, Y.-Z., Tao, S., Veach, R.A., *et al.* *J. Biol. Chem.* **270**(24), 14255-14258 (1995).
2. Torgerson, T.R., Colosia, A.D., Donahue, J.P., *et al.* *J. Immunol.* **161**(11), 6084-6092 (1998).
3. Kasibhatla, S., Genestier, L., and Green, D.R. *J. Biol. Chem.* **274**(2), 987-992 (1999).
4. Methot, L., Hermann, R., Tang, Y., *et al.* *Mol. Cell. Biol.* **33**(14), 2797-2808 (2013).
5. Wäster, P., Rosdahl, I., and Ölinger, K. *Br. J. Dermatol.* **171**(6), 1336-1346 (2014).

WARNING

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

SAFETY 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.

WARRANTY AND LIMITATION OF REMEDY

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