

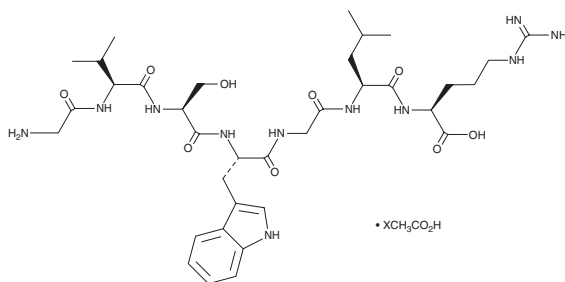
PRODUCT INFORMATION



PE 22-28 (acetate)

Item No. 39986

Formal Name: glycyl-L-valyl-L-seryl-L-tryptophylglycyl-L-leucyl-L-arginine, acetate
Synonym: Gly-Val-Ser-Trp-Gly-Leu-Arg-OH
Peptide Sequence: GVSWGLR-OH
MF: C₃₅H₅₅N₁₁O₉ • XC₂H₄O₂
FW: 773.9
Purity: ≥98%
Supplied as: A 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

PE 22-28 (acetate) is supplied as a solid. A stock solution may be made by dissolving the PE 22-28 (acetate) in the solvent of choice, which should be purged with an inert gas. PE 22-28 (acetate) is soluble in methanol and acetonitrile.

Description

PE 22-28 is a peptide inhibitor of the two-pore domain potassium channel K_{2p}2.1/TREK1 (IC₅₀ = 0.1 nM in HEK293 cells expressing the human channel) and a fragment of spadin (Item No. 36762).¹ It is selective for K_{2p}2.1/TREK1 over K_{2p}10.1/TREK2, K_{2p}13.1/TRAAK, K_{2p}18.1/TRESK, and K_{2p}3.1/TASK1 in HEK293 cells expressing the human channels at 100 nM. PE 22-28 (4 μg/kg for four days) increases neurogenesis and the levels of postsynaptic density protein 95 (Psd-95), a measure of increased synaptogenesis, in isolated mouse hippocampi. It decreases immobility in the forced swim test, latency to feed in the novelty-suppressed feeding test, and the time to escape in the Porsolt learned helplessness test in mice when administered at a dose of 0.3 μg/kg for four days.

Reference

1. Djillani, A., Pietri, M., Moreno, S., *et al.* Shortened spadin analogs display better TREK-1 inhibition, *in vivo* stability and antidepressant activity. *Front. Pharmacol.* **8:643**, (2017).

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.

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