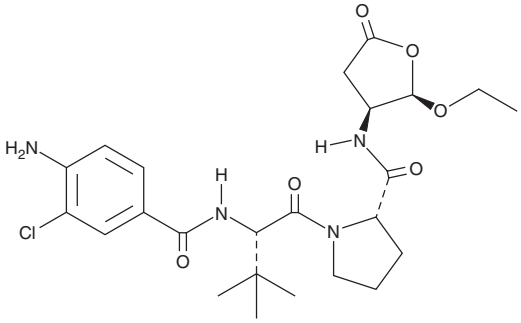
PRODUCT INFORMATION

VX-765

Item No. 28825

CAS Registry No.:	273404-37-8
Formal Name:	N-(4-amino-3-chlorobenzoyl)-3-methyl-L-valyl-N-[(2R,3S)-2-ethoxytetrahydro-5-oxo-3-furanyl]-L-prolinamide
Synonym:	Belnacasan
MF:	$C_{24}H_{33}ClN_4O_6$
FW:	509.0
Purity:	≥98%
UV/Vis.:	λ_{max}: 281 nm
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

VX-765 is supplied as a crystalline solid. A stock solution may be made by dissolving the VX-765 in the solvent of choice, which should be purged with an inert gas. VX-765 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of VX-765 in these solvents is approximately 30 mg/ml.

VX-765 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, VX-765 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. VX-765 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

VX-765 is a prodrug form of the caspase-1 inhibitor VRT-043198.[1] VX-765 (50, 100, and 200 mg/kg) inhibits LPS-induced increases in serum IL-1β levels in mice. It also reduces oxazolone-induced ear edema and levels of IL-1β, IL-18, and IFN-γ in ear tissue in an oxazolone-sensitized mouse model of delayed-type hypersensitivity. VX-765 reduces forepaw inflammation in a mouse model of collagen-induced arthritis in a dose-dependent manner. VX-765 (≥50 mg/kg) decreases seizure duration and the number of seizures in a mouse model of acute seizures induced by hippocampal kainic acid injection, as well as delays the onset of seizures when administered at doses of 100 and 200 mg/kg.[2] It also reduces the aggregated duration of epileptic activity in a mouse model of chronic epilepsy.

References

1. Wannamaker, W., Davies, R., Namchuk, M., *et al.* (S)-1-((S)-2-{[1-(4-amino-3-chloro-phenyl)-methanoyl]-amino}-3,3-dimethyl-butanoyl)-pyrrolidine-2-carboxylic acid ((2R,3S)-2-ethoxy-5-oxo-tetrahydro-furan-3-yl)-amide (VX-765), an orally available selective interleukin (IL)-converting enzyme/caspase-1 inhibitor, exhibits potent anti-inflammatory activities by inhibiting the release of IL-1β and IL-18. *J. Pharmacol. Exp. Ther.* **321(2),** 509-516 (2007).
2. Maroso, M., Balosso, S., Rivizza, T., *et al.* Interleukin-1β biosynthesis inhibition reduces acute seizures and drug resistant chronic epileptic activity in mice. *Neurotherapeutics* **8(2),** 304-315 (2011).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM