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Product Datasheet

Belnacasan, CAS [[273404-37-8]] FBM-10-4399

Article Name	Belnacasan, CAS [[273404-37-8]]
Biozol Catalog Number	FBM-10-4399
Supplier Catalog Number	10-4399
Alternative Catalog Number	FBM-10-4399-5MG,FBM-10-4399-25MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	ICE/caspase-1 inhibitor...
Molecular Weight	508.99
Purity	98% by HPLC NMR (Conforms)
Form	Off-white to white solid
CAS Number	[273404-37-8]
Formula	C ₂₄ H ₃₃ CIN ₄ O ₆

Application Notes

Prodrug of VRT-043198, a potent ($K_i = 0.8 \text{ nM}$ ICE/caspase-1, $<0.6 \text{ nM}$ caspase-4) and selective inhibitor of interleukin-converting enzyme/caspase-1 subfamily caspases.¹ VRT-043198 ICE/caspase-1 $IC_{50} = 0.67 \text{ } \mu\text{M}$ PBMCs, $1.0 \text{ } \mu\text{M}$ whole blood. It inhibited the release of IL-1 β and IL-18 from human monocytes in vitro and their production in vivo in models of inflammation. Belnacasan inhibited the activation and expression of the NLRP3 Inflammasome leading to moderation of depressive-like behaviors induced by chronic mild stress² and prevention of glial pyroptosis in multiple sclerosis models³. It inhibited pyroptosis in vascular smooth muscle cells during atherogenesis suggesting a possible therapeutic effect in treating atherosclerotic disease.⁴ Belnacasan reduced acute seizures and drug resistant chronic epileptic activity in mice⁵ and provided neuroprotection in two rat models of temporal lobe epilepsy⁶. It also displays protective effects in models of stroke⁷ and Alzheimers disease⁸.