PRODUCT INFORMATION



BAY 57-1293

Item No. 22129

CAS Registry No.:	348086-71-5		
Formal Name:	N-[5-(aminosulfonyl)-4-methyl-		
	2-thiazolyl]-N-methyl-4-(2-	N	0
	pyridinyl)-benzeneacetamide		F
Synonym:	Pritelivir		
MF:	C ₁₈ H ₁₈ N ₄ O ₃ S ₂		
FW:	402.5	_/	
Purity:	≥98%		
UV/Vis.:	λ _{max} : 247, 283 nm		\sim
Supplied as:	A crystalline solid	0	
Storage:	-20°C		N.
Stability:	≥4 years		

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BAY 57-1293 is supplied as a crystalline solid. A stock solution may be made by dissolving the BAY 57-1293 in the solvent of choice. BAY 57-1293 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of BAY 57-1293 in these solvents is approximately 30 mg/ml.

Description

BAY-57-1293 is an orally bioavailable helicase-primase inhibitor.¹ It inhibits the ATPase activity of herpes simplex virus (HSV) helicase-primase (IC₅₀ = 30 nM). It inhibits HSV replication in Vero cells $(IC_{50} = 20 \text{ nM} \text{ for both HSV-1}$ and HSV-2) and is also active against porcine and bovine HSV strains $(IC_{50}s = 5 \text{ and } 0.12 \,\mu\text{M}, \text{ respectively})$. In vivo, oral administration of BAY-57-1293 is effective against HSV-1 and HSV-2 in a lethal challenge model (ED₅₀ = 0.5 mg/kg) and in a zosteriform spread model, at a dose of 15 mg/kg, in mice and Lewis rats.^{1,2} It is also effective in a guinea pig model of genital herpes and a mouse model of ocular herpes. BAY-57-1293 reduces levels of amyloid β (A β) and phosphorylated Tau in HSV-1 infected Vero cells.³

References

- 1. Kleymann, G., Fischer, R., Betz, U.A., et al. New helicase-primase inhibitors as drug candidates for the treatment of herpes simplex disease. Nat. Med. 8(4), 392-398 (2002).
- 2. Betz, U.A., Fischer, R., Kleymann, G., et al. Potent in vivo antiviral activity of the herpes simplex virus primase-helicase inhibitor BAY 57-1293. Antimicrob. Agents Chemother. 46(6), 1766-1772 (2002).
- 3. Wozniak, M.A., Frost, A.L., Itzhaki, R.F., et al. The helicase-primase inhibitor BAY 57-1293 reduces the Alzheimer's disease-related molecules induced by herpes simplex virus type 1. Antiviral Res. 99(3), 401-404 (2013).

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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