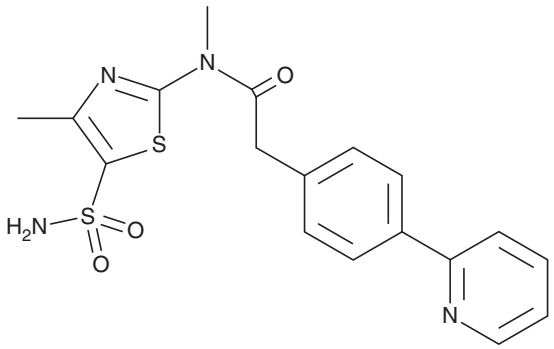
PRODUCT INFORMATION

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-pyridinyl)-benzeneacetamide
Synonym:	Pritelivir
MF:	$C_{18}H_{18}N_4O_3S_2$
FW:	402.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 247, 283 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

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 (IC_{50} = 30 nM). It inhibits HSV replication in Vero cells (IC_{50} = 20 nM for both HSV-1 and HSV-2) and is also active against porcine and bovine HSV strains (IC_{50}s = 5 and 0.12 µM, respectively). *In vivo*, oral administration of BAY-57-1293 is effective against HSV-1 and HSV-2 in a lethal challenge model (ED_{50} = 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 (Aβ) 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).

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