

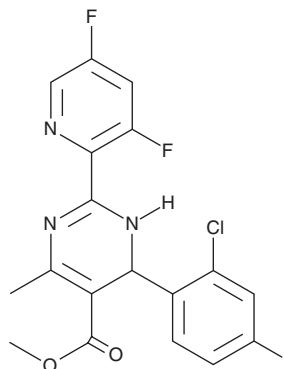
# PRODUCT INFORMATION



## (±)-BAY 41-4109

Item No. 26907

**CAS Registry No.:** 298708-79-9  
**Formal Name:** 4-(2-chloro-4-fluorophenyl)-2-(3,5-difluoro-2-pyridinyl)-1,4-dihydro-6-methyl-5-pyrimidinecarboxylic acid, methyl ester  
**MF:** C<sub>18</sub>H<sub>13</sub>ClF<sub>3</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 395.8  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 210, 277 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 41-4109 is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-BAY 41-4109 in the solvent of choice, which should be purged with an inert gas. (±)-BAY 41-4109 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (±)-BAY 41-4109 in ethanol is approximately 0.3 mg/ml and approximately 10 mg/ml in DMSO and DMF.

(±)-BAY 41-4109 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-BAY 41-4109 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. (±)-BAY 41-4109 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

(±)-BAY 41-4109 is a heteroaryldihydropyrimidine with antiviral activity.<sup>1</sup> It inhibits hepatitis B virus (HBV) replication in HepG2.2.15 cells (IC<sub>50</sub> = 202 nM) without affecting cell growth. (±)-BAY 41-4109 (25 mg/kg) reduces viral replication and viral load in a humanized mouse model of HBV infection.

### Reference

1. Brezillon, N., Brunelle, M.-N., Massinet, H., *et al.* Antiviral activity of Bay 41-4109 on hepatitis B virus in humanized Alb-uPA/SCID mice. *PLoS One* **6**(12), e25096 (2011).

#### 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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