

# PRODUCT INFORMATION



## XD14

Item No. 30740

**CAS Registry No.:** 1370888-71-3  
**Formal Name:** 4-acetyl-N-[5-[(diethylamino)sulfonyl]-2-hydroxyphenyl]-3-ethyl-5-methyl-1H-pyrrole-2-carboxamide

**MF:** C<sub>20</sub>H<sub>27</sub>N<sub>3</sub>O<sub>5</sub>S

**FW:** 421.5

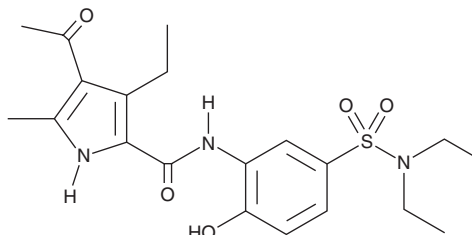
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 238, 307 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

XD14 is supplied as a crystalline solid. A stock solution may be made by dissolving the XD14 in the solvent of choice, which should be purged with an inert gas. XD14 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of XD14 in these solvents is approximately 30 mg/ml.

XD14 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, XD14 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. XD14 has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

XD14 is a bromodomain-containing protein (BRD) inhibitor.<sup>1</sup> It binds to BRD2, -3, and -4 (K<sub>d</sub>s = 170, 380, and 160 nM, respectively) and inhibits the growth of HL-60 cells (GI<sub>50</sub> = ~20 μM). XD14 (10 μM) also inhibits the growth of SR, K562, and MOLT-4 leukemia cells, as well as T47D breast, UO-31 renal, IGROV-1 ovarian, and KM12 colon cancer cells *in vitro*.

### Reference

1. Lucas, X., Wohlwend, D., Hügler, M., *et al.* 4-Acyl pyrroles: Mimicking acetylated lysines in histone code reading. *Angew. Chem. Int. Ed. Engl.* **52**(52), 14055-14059 (2013).

#### 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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