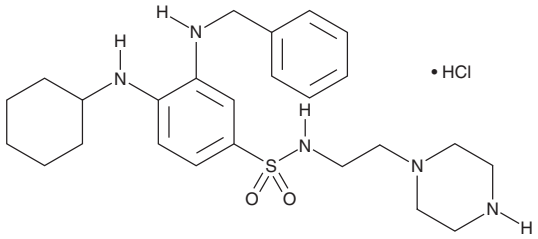
PRODUCT INFORMATION

UAMC-3203 (hydrochloride)

Item No. 29346

CAS Registry No.:	2271358-65-5
Formal Name:	4-(cyclohexylamino)-3-[(phenylmethyl)amino]-N-[2-(1-piperazinyl) ethyl]-benzenesulfonamide, monohydrochloride
MF:	$C_{25}H_{37}N_5O_2S \bullet HCl$
FW:	508.1
Purity:	≥98%
UV/Vis.:	λ_{max}: 236, 286 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

UAMC-3203 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the UAMC-3203 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. UAMC-3203 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of UAMC-3203 (hydrochloride) in these solvents is approximately 25 and 10 mg/ml, respectively.

UAMC-3203 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, UAMC-3203 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. UAMC-3203 (hydrochloride) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

UAMC-3203 is an inhibitor of ferroptosis that has an IC_{50} value of 10 nM for inhibition of erastin-induced ferroptosis in IMR-32 neuroblastoma cells.[1] It decreases iron-induced plasma lactate dehydrogenase (LDH) levels in a mouse model of acute iron poisoning when administered at a dose of 20 µmol/kg. It is not toxic to mice following chronic administration of a 20 µmol/kg dose for four weeks. UAMC-3203 has increased solubility and a longer half-life in mouse, rat, and human microsomes and isolated plasma than the ferroptosis inhibitor ferrostatin-1 (Item No. 17729). In an *in silico* membrane dynamics study, UAMC-3203 was incorporated into a phospholipid bilayer.

Reference

1. Devisscher, L., Van Coillie, S., Hofmans, S., *et al.* Discovery of novel, drug-like ferroptosis inhibitors with in vivo efficacy. *J. Med. Chem.* **61(22)**, 10126-10140 (2018).

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