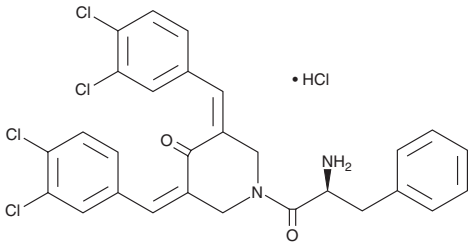
PRODUCT INFORMATION

RA190 (hydrochloride)

Item No. 44010

CAS Registry No.:	1617495-03-0
Formal Name:	1-[(2S)-2-amino-1-oxo-3-phenylpropyl]-3,5-*bis*[(3,4-dichlorophenyl)methylene]-4-piperidinone, monohydrochloride
MF:	$C_{28}H_{22}Cl_4N_2O_2$ • HCl
FW:	596.8
Purity:	≥95%
Supplied as:	A 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

RA190 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the RA190 in the solvent of choice, which should be purged with an inert gas. RA190 (hydrochloride) is sparingly soluble (1-10 mg/ml) in ethanol. RA190 (hydrochloride) is soluble (≥10 mg/ml) in DMSO.

Description

RA190 is an anticancer agent that was originally described as an inhibitor of proteasomal ubiquitin receptor ADRM1, also known as regulatory particle non-ATPase 13 (Rpn-13).[1] It was found to covalently bind ADRM1 in a cell-free assay and induce the accumulation of polyubiquinated proteins in HeLa cells. However, global proteomics analysis of RA190 in SK-MEL-5 cells indicates that RA190 interacts with 158 proteins but not ADRM1.[2] RA190 is cytotoxic to a panel of cancer cell lines (IC_{50}s = 1-10 µM); however, this cytotoxicity is not significantly modified when *ADRM1* is knocked out or overexpressed, indicating a potential polypharmacologic mechanism of action.

References

1. Anchoori, R.K., Karanam, B., Peng, S., *et al.* A bis-benzylidine piperidone targeting proteasome ubiquitin receptor RPN13/ADRM1 as a therapy for cancer. *Cancer Cell* **24(6)**, 791-805 (2013).
2. Dickson, P., Abegg, D., Vinogradova, E., *et al.* Physical and functional analysis of the putative Rpn13 inhibitor RA190. *Cell Chem. Biol.* **27(11)**, 1371-1382.e6 (2020).

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.

WARRANTY AND LIMITATION OF REMEDY
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