

# PRODUCT INFORMATION

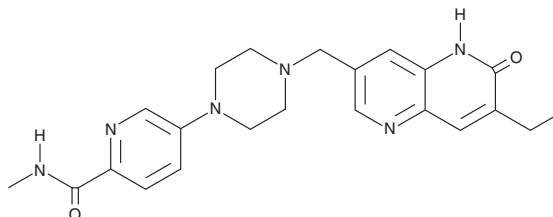


## AZD 5305

Item No. 37769

CAS Registry No.: 2589531-76-8  
Formal Name: 5-[4-[(7-ethyl-5,6-dihydro-6-oxo-1,5-naphthyridin-3-yl)methyl]-1-piperazinyl]-N-methyl-2-pyridinecarboxamide

MF:  $C_{22}H_{26}N_6O_2$   
FW: 406.5  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{max}$ : 222, 330 nm  
Supplied as: A solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

AZD 5305 is supplied as a solid. A stock solution may be made by dissolving the AZD 5305 in the solvent of choice, which should be purged with an inert gas. AZD 5305 is soluble in organic solvents such as DMSO, and dimethyl formamide. The solubility of AZD 5305 in these solvents is approximately 0.1 and 0.5 mg/ml, respectively.

### Description

AZD 5305 is an inhibitor of poly(ADP-ribose) polymerase 1 (PARP1;  $IC_{50} = 0.003 \mu\text{M}$ ).<sup>1</sup> It is selective for PARP1 over PARP2, PARP3, PARP5a, and PARP6 ( $IC_{50}$ s = 1.4, 3.4, >89, and 26  $\mu\text{M}$ , respectively). AZD 5305 inhibits the proliferation of BRCA2<sup>-/-</sup> DLD-1 colorectal cancer cells ( $IC_{50} = 0.002 \mu\text{M}$ ). It induces tumor regression in a patient-derived xenograft (PDX) mouse model of BRCA1 mutant triple-negative breast cancer (TNBC) when administered at doses ranging from 0.3 to 10 mg/kg.

### Reference

1. Johannes, J.W., Balazs, A., Barratt, D., *et al.* Discovery of 5-[4-[(7-ethyl-6-oxo-5,6-dihydro-1,5-naphthyridin-3-yl)methyl]piperazin-1-yl]-N-methylpyridine-2-carboxamide (AZD5305): A PARP1—DNA trapper with high selectivity for PARP1 over PARP2 and other PARPs. *J. Med. Chem.* **64**(19), 14498-14512 (2021).

#### 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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