# **PRODUCT** INFORMATION



**AMG 232** 

Item No. 25667

CAS Registry No.:	1352066-68-2	× /
Formal Name:	(3R,5R,6S)-5-(3-chlorophenyl)-	
	6-(4-chlorophenyl)-3-methyl-1-	
	[(1S)-2-methyl-1-[[(1-methylethyl)	HO
	sulfonyl]methyl]propyl]-2-oxo-3-	
	piperidineacetic acid	
MF:	C <sub>28</sub> H <sub>35</sub> Cl <sub>2</sub> NO <sub>5</sub> S	
FW:	568.6	
Purity:	≥98%	CI
Supplied as:	A crystalline solid	
Storage:	-20°C	CI
Stability:	≥4 years	
Information represents the product specifications. Patch specific analytical results are provided on each cartificate of analysis		

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# Laboratory Procedures

AMG 232 is supplied as a crystalline solid. A stock solution may be made by dissolving the AMG 232 in the solvent of choice, which should be purged with an inert gas. AMG 232 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AMG 232 in these solvents is approximately 30 mg/ml.

AMG 232 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AMG 232 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. AMG 232 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

AMG 232 is an inhibitor of the murine double minute 2 (MDM2) interaction with the tumor suppressor p53 ( $K_D = 0.045 \text{ nM}$ ;  $IC_{50} = 0.6 \text{ nM}$  in a cell-free binding assay).<sup>1</sup> It inhibits proliferation of HCT116 p53 wild-type, but not p53<sup>-/-</sup>, cells (IC<sub>50</sub>s = 10 nM and >25  $\mu$ M, respectively).<sup>2</sup> It reduces tumor growth in an SJSA-1 osteosarcoma mouse xenograft model ( $ED_{50} = 9.1 \text{ mg/kg}$ ) and induces complete regression of tumors in the same model when administered at a dose of 75 mg/kg per day for 10 days.<sup>1,2</sup> It induces apoptosis of SJSA-1 mouse xenograft tumor cells, decreasing BrdU-labeled cells, increasing cleaved caspase-3, and halting the cell cycle.<sup>1</sup>

# References

- 1. Canon, J., Osgood, T., Olson, S.H., et al. The MDM2 inhibitor AMG 232 demonstrates robust antitumor efficacy and potentiates the activity of p53-inducing cytotoxic agents. Mol. Cancer Ther. 14(3), 649-658 (2015).
- 2. Sun, D., Li, Z., Rew, Y., et al. Discovery of AMG 232, a potent, selective, and orally bioavailable MDM2-p53 inhibitor in clinical development. J. Med. Chem. 57(4), 1454-1472 (2014).

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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