# ABT-737



4-[4-[(4'-chloro[1,1'-biphenyl]-2-yl)methyl]-1-piperazinyl]-N-[[4-[[(1R)-3-(dimethylamino)-1-[(phenylthio)methyl]propyl]amino]-3nitrophenyl]sulfonyl]-Benzamide

CAS Registry No.: 852808-04-9

Smiles String: CN(C)CCC(CSc1ccccc1)Nc2ccc(cc2[N+](= O)[O-])S(=O)(=O)NC(=O)c3ccc(cc3)N4CCN(CC4)Cc5ccccc5c6ccc(cc6)Cl

Molecular Weight: 813.43

Molecular Formula: C42H45CIN6O5S2

Lot Number: Refer to vial

1H-NMR: Available on request

HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

## **Description:**

ABT-737 is a small-molecule inhibitor of the anti-apoptotic proteins Bcl-2, Bcl-X(L) and Bcl-w, with an affinity two to three orders of magnitude more potent than previously reported compounds. Mechanistic studies reveal that ABT-737 does not directly initiate the apoptotic process, but enhances the effects of death signals, displaying synergistic cytotoxicity with chemotherapeutics and radiation. ABT-737 exhibits single-agent-mechanism-based killing of cells from lymphoma and small-cell lung carcinoma lines, as well as primary patient-derived cells, and in animal models, ABT-737 improves survival, causes regression of established tumors, and produces cures in a high percentage of the mice. ABT-737 binds to Bcl-2, Bcl-xL and Bcl-w with very high affinities (Ki <1 nM) and also shows a very high specificity over Mcl-1 and A1.



## **Biological Activity**



## **Kinome Mapping**

None.

## **Shipping and Storage Temperature**

#### Shipping: Ambient

### Storage:

2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

## Solubility

DMSO 24mg/mL, Ethanol <1mg/mL

## **Preparing Stock Solutions**

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.8134	8.1343	16.2686	40.6715

## References

 Broch S, Hénon H, Debaud AL, Fogeron ML, Bonnefoy-Bérard N, Anizon F, Moreau P. Synthesis and biological activities of new di- and trimeric quinoline derivatives. Bioorg Med Chem. 2010 Oct 1;18(19):7132-43. doi: 10.1016/j.bmc.2010.07.029. Epub 2010 Jul 16. PubMed PMID: 20800501.

## Ordering Information

To order more of this or any other SYNkinase compound, go to synkinase.com, Call us Toll Free (US Only) at 1-877-854-6273 or email <u>orders@synkinase.com</u>.

Product Datasheet (Rev. 1.1)