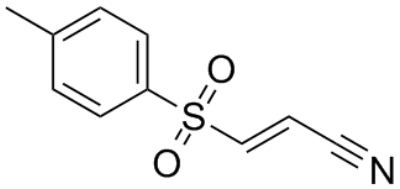
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	BAY 11-7082
Cat. No.	:	PC-43543
CAS No.	:	19542-67-7
Molecular Formula	:	$C_{10}H_9NO_2S$
Molecular Weight	:	207.249
Target	:	NF-κB
Solubility	:	10 mM in DMSO



Biological Activity

BAY 11-7082 is a **NF-κB** inhibitor that selectively and irreversibly inhibits the TNF-α-inducible phosphorylation of IκBα (IC50=10 uM), also inhibits ubiquitin-specific protease **USP7** and **USP21** with IC50 of 0.19 uM and 0.96 uM, respectively.
BAY 11-7082 induces apoptosis of HTLV-I-infected T-cell lines but only negligible apoptosis of HTLV-I-negative T cells, rapidly and efficiently reduces the DNA binding of NF-κB in HTLV-I-infected T-cell lines and down-regulates the expression of the antiapoptotic gene, Bcl-xL, regulated by NF-κB.
BAY 11-7082 selectively inhibits Tax-induced NF-κB activity in a human T-cell line.
BAY 11-7082 exerts effects by inactivating the E2-conjugating enzymes Ubc (ubiquitin conjugating) 13 and UbcH7 and the E3 ligase LUBAC (linear ubiquitin assembly complex), thereby preventing the formation of Lys63-linked and linear polyubiquitin chains.
BAY 11-7082 prevents ubiquitin conjugation to **Ubc13** and UbcH7 by forming a covalent adduct with their reactive cysteine residues.

References

Thévenod F, et al. ***J Biol Chem.*** 2000 Jan 21;275(3):1887-96.
2. Mori N, et al. ***Blood.*** 2002 Sep 1;100(5):1828-34.
3. Ritorto MS, et al. ***Nat Commun.*** 2014 Aug 27;5:4763.
4. Strickson S, et al. ***Biochem J.*** 2013 May 1;451(3):427-37.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com