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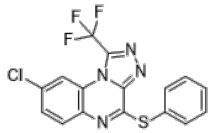
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	R-7050
Cat. No.	:	PC-22719
CAS No.	:	303997-35-5
Molecular Formula	:	$C_{16}H_8ClF_3N_4S$
Molecular Weight	:	380.77
Target	:	TNF Receptor
Solubility	:	10 mM in DMSO



Biological Activity

R-7050 is a specific small molecule TNF-alpha receptor (**TNFR**) antagonist with EC50 of 0.63 uM for TNFα-induced ICAM-1 expression inhibition, shows greater selectivity toward TNFα.
R-7050 displays 2- to 3-fold greater than EC50 for IL-1β-induced ICAM-1 expression (1.45 μM).
R-7050 inhibits phosphorylation of both the c-Jun N-terminal kinase (JNK) pathway (MKK4, JNKs, and ATF2) and p38 pathway (MKK3/6, p38, and MAPKAP2), inhibits interaction between TNFαRI, RIP1, and TRADD.
R-7050 blocks internalization of the TNFα ligand-receptor complex. exhibited inhibitory effects only in TNFα and LPA receptor systems, but not in IL-1βR, InsulinR, IGFR, or EGFR.

References

King MD, et al. ***Neurosci Lett.*** 2013 May 10;542:92-6.

Gururaja TL, et al. ***Chem Biol.*** 2007 Oct;14(10):1105-18.

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

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