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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

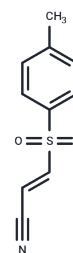
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BAY 11-7082

Chemical Properties

CAS No. :	19542-67-7
Formula:	C ₁₀ H ₉ NO ₂ S
Molecular Weight:	207.25
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	BAY 11-7082 (BAY 11-7821) is an NF-κB inhibitor that inhibits TNFα-induced IκBα phosphorylation (IC ₅₀ =10 μM). BAY 11-7082 is also an inhibitor of the ubiquitin-specific proteases USP7 and USP21 (IC ₅₀ =0.19/0.96 μM).
Targets(IC ₅₀)	Apoptosis,Others,IκB/IKK,DUB,Autophagy
In vitro	<p>METHODS: Human colorectal cancer cells HT29 were treated with BAY 11-7082 (10-100 μM) for 1 h, followed by stimulation with TNF (50 ng/mL) for 3-10 min or Flag-TWEAK (200 ng/mL) for 8 h. The expression levels of target proteins were detected by Western Blot.</p> <p>RESULTS: Bay 11-7082 inhibited TWEAK-induced p100 processing and TNF-induced phosphorylation and degradation of IκBα. Both NFκB pathways were significantly blocked at concentrations of 30-100 μM of Bay 11-7082. [1]</p> <p>METHODS: Macrophage RAW264.7 was treated with BAY 11-7082 (15 μM) and LPS (1 μg/mL) for 6 h, and TNF-α levels were measured by ELISA Assay.</p> <p>RESULTS: BAY 11-7082 blocked TNF-α production in LPS-treated RAW264.7 cells, which is an inflammatory response generated by activated NF-κB. [2]</p>
In vivo	<p>METHODS: To investigate the immunomodulatory effects, BAY 11-7082 (5-10 mg/kg) was injected intraperitoneally into C57BL/6 mice, followed 1 h later by intravenous injection of poly U (50 μg/head) + in vivo-jetPEI.</p> <p>RESULTS: Treatment with BAY 11-7082 inhibits the IFN response in vivo by limiting pDC function when stimulated with TLR ligands. [3]</p> <p>METHODS: To investigate the effects on psoriasiform dermatitis, BAY 11-7082 (20 mg/kg) was injected intraperitoneally into C57BL/6 and NLRP3 KO mice with IMQ-induced psoriasiform lesions once daily for seven days.</p> <p>RESULTS: BAY 11-7082 blunted epidermal thickness, acanthosis and inflammatory infiltrates. BAY 11-7082 decreased the expression of pNF-κB, NLRP3, TNF-α, IL-6 and IL-1β, attenuated the phosphorylation of signal transducers and STAT3, and lowered IL-23 levels. [4]</p>
Kinase Assay	UBE1 (0.17 μM) in 22.5 μL of 20 mM Hepes, pH 7.5, containing 10 μM ubiquitin is incubated for 45 min at 21°C with 1 μL of DMSO or 1 μL of BAY 11-7082 in DMSO. A 2.5 μL solution of 10 mM magnesium acetate and 0.2 mM ATP is added, incubated for 10 min at 30°C, and the reactions are terminated by the addition of 2.5 μL of 10% (w/v) SDS and heating for 6 min at 75°C. The samples are subjected to SDS/PAGE in the absence of any thiol. The gels are stained for 1 h with Coomassie Instant Blue and destained by washing

with water. The loading of ubiquitin to E2 conjugating enzymes is carried out in an identical manner, except that UBE1 (0.17 μ M) is mixed with Ubc13 (2.4 μ M) or UbcH7 (2.9 μ M) prior to incubation with BAY 11-7082[3].

Cell Research
Cells are transfected with siRNA in 96-well microtiter plates and then cultured for 72 hours in complete NSCLC medium, treated with BAY 11-7082 for 12 hours. Cells are incubated with [³H]thymidine for 3 hours. The cells are collected on filters using an automatic cell harvester and radioactivity on the filters is measured by β -scintillation counting.(Only for Reference)

Solubility Information

Solubility
Ethanol: 5.2 mg/mL (25 mM),
DMSO: 60 mg/mL (289.51 mM),
(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8251 mL	24.1255 mL	48.2509 mL
5 mM	0.965 mL	4.8251 mL	9.6502 mL
10 mM	0.4825 mL	2.4125 mL	4.8251 mL
50 mM	0.0965 mL	0.4825 mL	0.965 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Rauert-Wunderlich H, et al. The IKK inhibitor Bay 11-7082 induces cell death independent from inhibition of activation of NF κ B transcription factors. PLoS One. 2013;8(3):e59292.
Ye Z, Ai X, Yang K, et al. Targeting

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481