Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329 Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID B030966 CAS No. 19542-67-7

Chemical Name 3-[(4-methylphenyl)sulfonyl]-(2E)-propenenitrile

Synonym

Formula C₁₀H₉NO₂S Formula Wt. 207.25

Melting Point

Purity ≥98%

Solubility Soluble in DMSO (>25 mg/ml), ethanol (15 mg/ml), methanol,

dichloromethane, DMF (~25 mg/ml), and 1:3 DMF:PBS (pH 7.2) (~0.25 mg/ml). Insoluble in water and sparingly soluble in

Store Temp 4°C

Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
B030966	5 mg
B030966	10 mg
B030966	25 mg
B030966	100 mg

Description BAY 11-7082 is an inhibitor of IkappaBalpha phosphorylation and degradation. Treatment of multiple myeloma cells with BAY 11 -7082 has been shown to induce rapid swelling followed by disintegration of the cell body. Studies have shown that BAY 11-7082 inhibits not only NF-kB, but in addition inhibits many components of inflammatory signaling pathways including PI3K/Akt/IKK/NFkB, ERK/JNK/AP-1, TBK1/IRF-3, and Jak-2/STAT-1. BAY 11-7082 has also been found to target the NLRP3 inflammasome pathway at many levels.

References Goffi F, Boroni F, Benarese M, et al. The inhibitor of I kappa B alpha phosphorylation BAY 11-7082 prevents NMDA neurotoxicity in mouse hippocampal slices. Neurosci Lett. 2005 Apr 4;377(3):147-151. PMID: 15755516.

> Rauert-Wunderlich H, Siegmund D, Maier E, et al. The IKK inhibitor BAY 11-7082 induces cell death independent from inhibition of activation of NFkB transcription factors. PLoS One. 2013;8(3):e59292. PMID: 23527154.

Strickson S, Campbell DG, Emmerich CH, et al. The anti-inflammatory drug BAY 11-7082 suppresses the MyD88-dependent signaling network by targeting the ubiquitin system. Biochem J. 2013 May 1;451(3):427-437. PMID: 23441730.

Lee J, Rhee MH, Kim E, et al. BAY 11-7082 is a broad-spectrum inhibitor with anti-inflammatory activity against multiple targets. Mediators Inflamm. 2012;2012:416036. PMID: 27745523.

Juliana C, Fernandes-Alnemri T, Wu J, et al. Anti-inflammatory compounds parthenolide and BAY 11-7082 are direct inhibitors of the inflammasome. J Biol Chem. 2010 Mar 26;285(13):9792-9802. PMID: 20093358.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.