



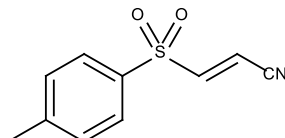
Catalog # 10-1296

BAY 11-7082

CAS# 19542-67-7

(E)-3-(4-Methylphenylsulfonyl)-2-propenenitrile

Lot # X101418



BAY 11-7082 inhibits cytokine-induced I κ B- α phosphorylation via inhibition of I κ B Kinase which results in inhibition of NF κ B¹. Inhibits anchorage-independent growth of mammary epithelial cells induced with 4-hydroxyestradiol via inhibition of NF κ B activation². Inhibits IFN α production and blocks nuclear translocation of IRF7 in plasmacytoid dendritic cells³. Facilitates wound healing by inhibiting TNF α -induced MMP expression⁴. A useful tool for probing the involvement of NF κ B in physiological and pathophysiological processes⁵. Cell permeable.

- 1) Pierce et al. (1997) *Novel inhibitor of cytokine-induced I κ B α phosphorylation and endothelial cell adhesion molecule expression show anti-inflammatory effects in vivo*; J. Biol. Chem., **272** 21096
- 2) Park et al. (2009) *4-hydroxyestradiol induces anchorage-independent growth of human mammary epithelial cells via activation of I κ B kinase: potential role of reactive oxygen species*; Cancer Res., **69** 2416
- 3) Miyamoto et al. (2010) *Inhibitor of I κ B kinase activity, BAY 11-7082, interferes with interferon regulatory factor 7 nuclear translocation and type I interferon production by plasmacytoid dendritic cells*; Arthritis Res. Ther., **12** R87
- 4) Xu et al. (2019) *Bay 11-7082 facilitates wound healing by antagonizing mechanical injury – and TNF- α -induced expression of MMPs in posterior cruciate ligament*; Connect. Tissue Res. **60** 311
- 5) Kim et al. (2018) *TNF- α induces human neural progenitor cell survival after oxygen-glucose deprivation by activating the NF κ B pathway*; Exp. Mol. Med., **50** 14

PHYSICAL DATA

Molecular Weight:	207.27
Molecular Formula:	C ₁₀ H ₉ NO ₂ S
Purity:	>98% (TLC)
Solubility:	DMSO (at least 25 mg/ml), ethanol (15 mg/mL)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at room temperature for up to one year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.