

# **Data Sheet**

**Product Name:** (E)-Necrosulfonamide

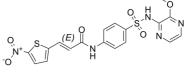
Cat. No.: CS-5851 CAS No.: 1360614-48-7

Molecular Formula: C18H15N5O6S2

Molecular Weight: 461.47

Target: Mixed Lineage Kinase
Pathway: MAPK/ERK Pathway

Solubility: DMSO :  $\geq$  28 mg/mL (60.68 mM); H2O : < 0.1 mg/mL (insoluble)



## **BIOLOGICAL ACTIVITY:**

(E)-Necrosulfonamide is a **necroptosis** inhibitor acting by selectively targeting the mixed lineage kinase domain-like protein **(MLKL)** to block the necrosome formation. **In Vitro**: (E)-Necrosulfonamide (0.5-2.5  $\mu$ M; 20 hours) reduced TRAIL (50 ng/mL) and STS (1  $\mu$ M) - induced necroptosis in a concentration-dependent manner<sup>[3]</sup>.

#### References:

- [1]. Steinhart L et al. Smac mimetic and demethylating agents synergistically trigger cell death in acute myeloid leukemia cells andovercome apoptosis resistance by inducing necroptosis. Cell Death Dis. 2013 Sep 12;
- [2]. Sun L et al. Mixed lineage kinase domain-like protein mediates necrosis signaling downstream of RIP3 kinase. Cell. 2012 Jan 20;148(1-2):213-27.
- [3]. Dunai ZA et al. Staurosporine induces necroptotic cell death under caspase-compromised conditions in U937 cells. PLoS One. 2012;7(7):
- [4]. Bae JH et al. Chemical regulation of signaling pathways to programmed necrosis. Arch Pharm Res. 2014 Jun;37(6):689-97.

# **CAIndexNames**:

2-Propenamide, N-[4-[[(3-methoxy-2-pyrazinyl)amino]sulfonyl]phenyl]-3-(5-nitro-2-thienyl)-, (2E)-

### **SMILES:**

O = C(NC1 = CC = C(S(=O)(NC2 = NC = CN = C2OC) = O)C = C1)/C = C/C3 = CC = C([N+]([O-]) = O)S3.[(E)]

Caution: Product has not been fully validated for medical applications. For research use only.

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