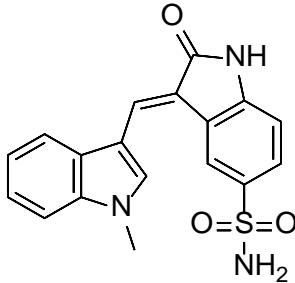


# Product data sheet



MedKoo Cat#: 530952 Name: OXSI-2 CAS: 622387-85-3 Chemical Formula: C <sub>18</sub> H <sub>15</sub> N <sub>3</sub> O <sub>3</sub> S Exact Mass: 353.0834 Molecular Weight: 353.396	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

## 1. Product description:

OXSI-2 is an Syk Inhibitor. OXSI-2 blocks nigericin-induced inflammasome signaling and pyroptosis independent of potassium efflux. OXSI-2 inhibits inflammasome assembly, caspase-1 activation, IL-1 $\beta$  processing and release, mitochondrial ROS generation, and pyroptotic cell death. Using a novel live cell potassium sensor we show that Syk inhibition with OXSI-2 has no effect on potassium efflux kinetics and that blockade of potassium efflux with extracellular potassium alters Syk phosphorylation.

## 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

## 3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	10.0	28.30

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.83 mL	14.15 mL	28.30 mL
5 mM	0.57 mL	2.83 mL	5.66 mL
10 mM	0.28 mL	1.42 mL	2.83 mL
50 mM	0.06 mL	0.28 mL	0.57 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

## 6. Recommended literature which reported protocols for in vitro and in vivo study

### In vitro study

1. Yaron JR, Rao MY, Gangaraju S, Zhang L, Kong X, Su F, Tian Y, Glenn HL, Meldrum DR. The oxindole Syk inhibitor OXSI-2 blocks nigericin-induced inflammasome signaling and pyroptosis independent of potassium efflux. *Biochem Biophys Res Commun.* 2016 Apr 8;472(3):545-50. doi: 10.1016/j.bbrc.2016.03.021. Epub 2016 Mar 9. PMID: 26970308.
2. Buitrago L, Langdon WY, Sanjay A, Kunapuli SP. Tyrosine phosphorylated c-Cbl regulates platelet functional responses mediated by outside-in signaling. *Blood.* 2011 Nov 17;118(20):5631-40. doi: 10.1182/blood-2011-01-328807. Epub 2011 Oct 3. PMID: 21967979; PMCID: PMC3217362.

### In vivo study

TBD

## 7. Bioactivity

### Biological target:

OXSI-2 is a bioavailable, cell-permeable Syk inhibitor with an EC<sub>50</sub> of 313 nM and an IC<sub>50</sub> of 14 nM.

### In vitro activity

# Product data sheet



The aim of the present study is to explore in detail the effects of the oxindole Syk inhibitor OXSI-2 on various aspects of nigericin-induced inflammasome signaling. These results indicate that OXSI-2 inhibits inflammasome assembly, caspase-1 activation, IL-1 $\beta$  processing and release, mitochondrial ROS generation, and pyroptotic cell death. Using a novel live cell potassium sensor we show that Syk inhibition with OXSI-2 has no effect on potassium efflux kinetics and that blockade of potassium efflux with extracellular potassium alters Syk phosphorylation.

Reference: Biochem Biophys Res Commun. 2016 Apr 8;472(3):545-50. <https://pubmed.ncbi.nlm.nih.gov/26970308/>

In vivo activity

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TBD

*Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.*