

# Product data sheet



MedKoo Cat#: 555952 Name: SGA360 CAS#: 680611-86-3 Chemical Formula: C <sub>19</sub> H <sub>17</sub> F <sub>3</sub> N <sub>2</sub> O <sub>2</sub> Exact Mass: 362.1242 Molecular Weight: 362.35	
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:

SGA360 is a selective AHR modulator, which is a ligand-dependent transcription factor that mediates the toxicity of certain xenobiotics and polyaromatic hydrocarbons.

## 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
DMF	20	55.20
DMSO	10	27.60
Ethanol	2.5	6.90

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.76 mL	13.80 mL	27.60 mL
5 mM	0.55 mL	2.76 mL	5.52 mL
10 mM	0.28 mL	1.38 mL	2.76 mL
50 mM	0.06 mL	0.28 mL	0.55 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

To be determined

In vivo study

- Muku GE, Lahoti TS, Murray IA, Podolsky MA, Smith KJ, Hubbard TD, Kuzu G, Gowda K, Amin SG, Perdew GH. Ligand-mediated cytoplasmic retention of the Ah receptor inhibits macrophage-mediated acute inflammatory responses. *Lab Invest.* 2017 Dec;97(12):1471-1487. doi: 10.1038/labinvest.2017.92. Epub 2017 Sep 11. PMID: 28892097; PMCID: PMC5711556.
- Murray IA, Krishnegowda G, DiNatale BC, Flaveny C, Chiaro C, Lin JM, Sharma AK, Amin S, Perdew GH. Development of a selective modulator of aryl hydrocarbon (Ah) receptor activity that exhibits anti-inflammatory properties. *Chem Res Toxicol.* 2010 May 17;23(5):955-66. doi: 10.1021/tx100045h. PMID: 20423157; PMCID: PMC2871980.

## 7. Bioactivity

Biological target:

SGA360 competitively binds to AhR (IC<sub>50</sub> = 3 μM) and represses serum amyloid A 1 (SAA1) gene expression induced by IL-1β in Huh7 cells.

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In vitro activity

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To be determined

In vivo activity

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SGA360 is a selective Ah receptor modulator (SAhRM) that exhibits anti-inflammatory properties in vivo. SGA360 significantly inhibited 2-O-tetradecanoylphorbol-13-acetate (TPA)-mediated ear swelling and induction of a number of inflammatory genes in C57BL6/J mice. SGA360 had no effect on TPA-mediated ear swelling or inflammatory gene expression in Ahr(-/-) mice.

Reference: Chem Res Toxicol. 2010 May 17;23(5):955-66. <https://pubmed.ncbi.nlm.nih.gov/20423157/>

*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.*