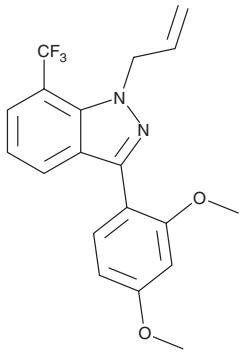
# PRODUCT INFORMATION

## SGA360

*Item No. 21986*




**CAS Registry No.:** 680611-86-3
**Formal Name:** 3-(2,4-dimethoxyphenyl)-1-(2-propen-1-yl)-7-(trifluoromethyl)-1H-indazole
**MF:** $C_{19}H_{17}F_3N_2O_2$
**FW:** 362.4
**Purity:** ≥98%
**UV/Vis.:** $\lambda_{max}$: 319 nm
**Supplied as:** A crystalline solid
**Storage:** -20°C
**Stability:** ≥2 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

SGA360 is supplied as a crystalline solid. A stock solution may be made by dissolving the SGA360 in the solvent of choice. SGA360 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SGA360 in these solvents is approximately 2.5, 10, and 20 mg/ml, respectively.

SGA360 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SGA360 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SGA360 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

SGA360 is a selective modulator of the aryl hydrocarbon receptor (AhR), which is a ligand-dependent transcription factor that mediates the toxicity of certain xenobiotics and polyaromatic hydrocarbons.[1,2] SGA360 competitively binds to AhR ($IC_{50}$ = 3 µM) and represses serum amyloid A 1 (SAA1) gene expression induced by IL-1β in Huh7 cells.[1] It also reduces inflammation and decreases the mRNA expression of the inflammatory mediators COX-2, IL-6, IL-1β, SAA3, and IL-10 in wild-type, but not AhR knockout, mice in a model of inflammatory ear edema. SGA360 also reduces acute inflammation in murine models of septic shock, gout, and peritonitis when the high-affinity AhR variant is expressed.[3]

### References


1. Murray, I.A., Krishnegowda, G., DiNatale, B.C., *et al.* Development of a selective modulator of aryl hydrocarbon (Ah) receptor activity that exhibits anti-inflammatory properties. *Chem. Res. Toxicol.* **23(5)**, 955-966 (2010).
2. Denison, M.S. and Nagy, S.R. Activation of the aryl hydrocarbon receptor by structurally diverse exogenous and endogenous chemicals. *Annu. Rev. Pharmacol. Toxicol.* **43**, 309-334 (2003).
3. Muku, G.E., Lahoti, T.S., Murray, I.A., *et al.* Ligand-mediated cytoplasmic retention of the Ah receptor inhibits macrophage-mediated acute inflammatory responses. *Lab Invest.* (2017).





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