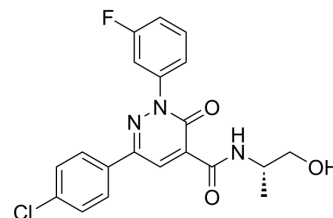


## BAY-218

<b>Cat. No.:</b>	HY-111449		
<b>CAS No.:</b>	2162982-11-6		
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>17</sub> ClFN <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	401.82		
<b>Target:</b>	Aryl Hydrocarbon Receptor		
<b>Pathway:</b>	Immunology/Inflammation		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : ≥ 250 mg/mL (622.17 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		2.4887 mL	12.4434 mL	24.8868 mL
	5 mM		0.4977 mL	2.4887 mL	4.9774 mL
	10 mM		0.2489 mL	1.2443 mL	2.4887 mL

Please refer to the solubility information to select the appropriate solvent.

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.08 mg/mL (5.18 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.08 mg/mL (5.18 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

BAY-218 (AHR antagonist 1) is an aryl hydrocarbon receptor (AHR) antagonist. BAY-218 has AHR inhibitory activity with an IC<sub>50</sub> of 39.9 nM in in U87 glioblastoma cells. BAY-218 can be used for the research of cancer or conditions with dysregulated immune responses<sup>[1]</sup>.

### IC<sub>50</sub> & Target

IC<sub>50</sub>: 39.9 nM (AHR in human cell line)<sup>[1]</sup>

### In Vitro

BAY-218 (example 23) (72 pM-20 μM) has AHR inhibitory activity with an IC<sub>50</sub> of 39.9 μM in in U87 glioblastoma cells<sup>[1]</sup>.  
 ?BAY-218 (1 nM-3 μM) has CYP1A1 inhibitory activity with an IC<sub>50</sub> of 70.7 μM in human monocytic U937 cell line<sup>[1]</sup>.  
 ?BAY-218 (1 μM) reverses KA-induced inhibition of TNFα production by LPS stimulated human monocytes<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR<sup>[1]</sup>

Cell Line:	human monocytic U937 cells
Concentration:	1 nM-3 $\mu$ M
Incubation Time:	
Result:	Regulated antagonise ligand-induced AHR gene in a dose-dependent manner.

#### In Vivo

BAY-218 (example 23) (p.o; 30 mg/kg; bid) has good anti-tumor effect combined with aPD-L1<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Balb/c mice (subcutaneously CT26 cells) <sup>[1]</sup>
Dosage:	30 mg/kg
Administration:	p.o, bid
Result:	Significantly decreased tumors size combined with aPD-L1.

## REFERENCES

[1]. Norbert Schmees, et al. 3-oxo-2,6-diphenyl-2,3-dihydropyridazine-4-carboxamides. WO2017202816A1.

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

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