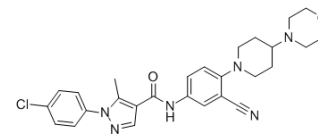


Y-320

Cat. No.:	HY-15898		
CAS No.:	288250-47-5		
Molecular Formula:	C ₂₇ H ₂₉ ClN ₆ O ₂		
Molecular Weight:	505.01		
Target:	Interleukin Related		
Pathway:	Immunology/Inflammation		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 5.5 mg/mL (10.89 mM; Need ultrasonic)

Concentration	Solvent	Mass	Preparing Stock Solutions		
			1 mg	5 mg	10 mg
1 mM			1.9802 mL	9.9008 mL	19.8016 mL
5 mM			0.3960 mL	1.9802 mL	3.9603 mL
10 mM			0.1980 mL	0.9901 mL	1.9802 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: ≥ 0.5 mg/mL (0.99 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 0.5 mg/mL (0.99 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 0.5 mg/mL (0.99 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Y-320 is a new phenylpyrazole anilide immunomodulator; inhibits IL-17 production by CD4 T cells stimulated with IL-15 with IC₅₀ values of 20 to 60 nM. IC₅₀ value: 20-60 nM (IL-17 production) [1] Target: IL-17Y-320 inhibited IL-17 production by CD4 T cells stimulated with IL-15 with IC₅₀ values of 20 to 60 nM. Oral administration of Y-320 (0.3 to 3 mg/kg) significantly inhibited the development and progression of arthritis and joint destruction with reduction of IL-17 mRNA expression in arthritic joints of type II collagen-induced arthritis (CIA) in DBA/1J mice. Y-320 in combination with anti-murine tumor necrosis factor-α monoclonal antibody showed a synergistic effect on mouse CIA. Moreover, therapeutic treatment with Y-320 (0.3 and 1 mg/kg orally) ameliorated CIA in cynomolgus monkeys [1].

CUSTOMER VALIDATION

- Am J Transl Res. 2020 Feb 15;12(2):551-562.
- bioRxiv. 2020 Jun.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Ushio H, et al. A new phenylpyrazoleamide, y-320, inhibits interleukin 17 production and ameliorates collagen-induced arthritis in mice and cynomolgus monkeys. Pharmaceuticals (Basel). 2013 Dec 23;7(1):1-17.

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

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