

# Product data sheet



MedKoo Cat#: 562551 Name: R-7050 CAS: 303997-35-5 Chemical Formula: C <sub>16</sub> H <sub>8</sub> ClF <sub>3</sub> N <sub>4</sub> S Exact Mass: 380.011 Molecular Weight: 380.77	
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.

## Product description:

R-7050 is a TNF- $\alpha$  receptor antagonist.

## 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 (ultrasonic)	25	65.66

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.63 mL	13.13 mL	26.26 mL
5 mM	0.53 mL	2.63 mL	5.25 mL
10 mM	0.26 mL	1.31 mL	2.63 mL
1 mM	2.63 mL	13.13 mL	26.26 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

- Cha M, Kwon M, Park M, Oh JH, Sung KK, Lee BH. Combined treatment of Taraxaci Herba and R7050 alleviates the symptoms of herpes simplex virus-induced Behçet's disease in rats. *Integr Med Res.* 2021 Sep;10(3):100720. doi: 10.1016/j.imr.2021.100720. Epub 2021 Feb 17. PMID: 33898245; PMCID: PMC8059053.
- Wen Y, Lu X, Ren J, Privratsky JR, Yang B, Rudemiller NP, Zhang J, Griffiths R, Jain MK, Nedospasov SA, Liu BC, Crowley SD. KLF4 in Macrophages Attenuates TNF $\alpha$ -Mediated Kidney Injury and Fibrosis. *J Am Soc Nephrol.* 2019 Oct;30(10):1925-1938. doi: 10.1681/ASN.2019020111. Epub 2019 Jul 23. PMID: 31337692; PMCID: PMC6779357.

## 7. Bioactivity

Biological target:

R-7050 acts by blocking receptor-adaptor molecule complex formation and subsequent receptor internalization, but not TNF- $\alpha$  ligand-receptor binding.

In vitro activity

To be determined

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## In vivo activity

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This study found that repetitive injection of Taraxaci Herba and/or R-7050 reduced the symptoms of Behçet's disease and significantly decreased IL-6, IL-1 $\beta$ , and TNF $\alpha$  in blood sera of mice. This treatment reduced the ulcers and the deterioration of skin.

Reference: Integr Med Res. 2021 Sep;10(3):100720. <https://pubmed.ncbi.nlm.nih.gov/33898245/>

*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.*