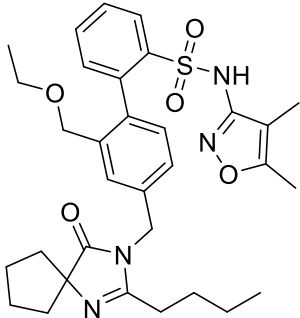


# Product data sheet



MedKoo Cat#: 206451 Name: Sparsentan CAS#: 254740-64-2 Chemical Formula: C <sub>32</sub> H <sub>40</sub> N <sub>4</sub> O <sub>5</sub> S Exact Mass: 592.2719 Molecular Weight: 592.75		
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:

Sparsentan, also known as RE-021, PS433540 and DARA-a, is a dual angiotensin II and endothelin A receptor antagonist. Sparsentan shows good oral bioavailability in rats, dogs, and monkeys, averaging 40%, 86%, and 21% F, respectively.

## 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	100	168.71

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.69 mL	8.44 mL	16.87 mL
5 mM	0.34 mL	1.69 mL	3.37 mL
10 mM	0.17 mL	0.84 mL	1.69 mL
50 mM	0.03 mL	0.17 mL	0.34 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

- Nagasawa H, Ueda S, Suzuki H, Jenkinson C, Fukao Y, Nakayama M, Otsuka T, Okuma T, Clapper W, Liu K, Nguyen M, Komers R, Suzuki Y. Sparsentan is superior to losartan in the gddY mouse model of IgA nephropathy. Nephrol Dial Transplant. 2024 Jan 25;gfae021. doi: 10.1093/ndt/gfae021. Epub ahead of print. PMID: 38271614.
- Cosgrove D, Gratton MA, Madison J, Vosik D, Samuelson G, Meehan D, Delimont D, Phillips G, Smyth B, Pramparo T, Jarocki D, Nguyen M, Komers R, Jenkinson C. Dual inhibition of the endothelin and angiotensin receptor ameliorates renal and inner ear pathologies in Alport mice. J Pathol. 2023 Jul;260(3):353-364. doi: 10.1002/path.6087. Epub 2023 May 31. PMID: 37256677; PMCID: PMC10330771.

## 7. Bioactivity

Biological target:

Sparsentan is a dual angiotensin II and endothelin A receptor antagonist with Kis of 0.8 and 9.3 nM, respectively.

In vitro activity

To be determined

# Product data sheet



## In vivo activity

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Sparsentan shows promise for treating both kidney and hearing problems in Alport syndrome patients. In an autosomal-recessive Alport mouse model, sparsentan delayed kidney damage onset, reduced protein in urine, and improved kidney function better than losartan. Sparsentan also protected the inner ear from damage, reducing the risk of hearing loss. Even after the onset of kidney damage, sparsentan improved mouse lifespan and kidney health.

Reference: J Pathol. 2023 Jul;260(3):353-364. <https://pubmed.ncbi.nlm.nih.gov/37256677/>

*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.*