

# Product data sheet



MedKoo Cat#: 206035 Name: EMD534085 CAS#: 858668-07-2 Chemical Formula: C <sub>25</sub> H <sub>31</sub> F <sub>3</sub> N <sub>4</sub> O <sub>2</sub> Exact Mass: 476.23991 Molecular Weight: 476.53		
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:

EMD534085 is a kinesin inhibitor currently in clinical development.

## 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	26.0	54.56

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.10 mL	10.49 mL	20.99 mL
5 mM	0.42 mL	2.10 mL	4.20 mL
10 mM	0.21 mL	1.05 mL	2.10 mL
50 mM	0.04 mL	0.21 mL	0.42 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

TBD

In vivo study

1. Schiemann K, Finsinger D, Zenke F, Amendt C, Knöchel T, Bruge D, Buchstaller HP, Emde U, Stähle W, Anzali S. The discovery and optimization of hexahydro-2H-pyrano[3,2-c]quinolines (HHPQs) as potent and selective inhibitors of the mitotic kinesin-5. Bioorg Med Chem Lett. 2010 Mar 1;20(5):1491-5. doi: 10.1016/j.bmcl.2010.01.110. Epub 2010 Jan 25. PMID: 20149654.

## 7. Bioactivity

Biological target:

EMD534085 is a potent and selective inhibitor of the mitotic kinesin-5 with an IC<sub>50</sub> of 8 nM.

In vitro activity

TBD

In vivo activity

The antitumor activity of EMD 534085 was determined in vivo using the subcutaneously growing human xenograft Colo205 colon carcinoma model. Two doses of EMD 534085 (15 mg/kg and 30 mg/kg) were applied twice weekly by ip injection when tumors reached a mean size of approximately 70 mm<sup>3</sup>. EMD 534085 caused a dose-dependent antitumor effect, which was resulting in a

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complete growth inhibition for the 30 mg/kg dose group ( $T/C = 19$ ,  $p < 0.001$  Anova test) and in a reduced growth rate for the lower dose group ( $T/C = 62$ ). Both doses of EMD 534085 were well tolerated as no body weight loss was observed (Fig. 3).

Reference: Bioorg Med Chem Lett. 2010 Mar 1;20(5):1491-5. <https://pubmed.ncbi.nlm.nih.gov/20149654/>

*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.*