# Product data sheet



MedKoo Cat#: 563354		
Name: MAL2-11B		
CAS: 831217-43-7		
Chemical Formula: C <sub>31</sub> H <sub>32</sub> N <sub>2</sub> O <sub>5</sub>		
Exact Mass: 512.2311		
Molecular Weight: 512.6060		N <sub>0</sub>
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	☐ VOVOH
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	$\neg$
_	In solvent: -80°C 3 months; -20°C 2 weeks.	

### 1. Product description:

MAL2-11B is an inhibitor of Simian Virus 40 replication. It acts by targeting the molecular chaperone function and ATPase activity of T antigen. MAL2-11B is also a MAL3-101 precursor.

#### 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	100.0	195.08

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.95 mL	9.75 mL	19.51 mL
5 mM	0.39 mL	1.95 mL	3.90 mL
10 mM	0.20 mL	0.98 mL	1.95 mL
50 mM	0.04 mL	0.20 mL	0.39 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

- 1. Ireland AW, Gobillot TA, Gupta T, Seguin SP, Liang M, Resnick L, Goldberg MT, Manos-Turvey A, Pipas JM, Wipf P, Brodsky JL. Synthesis and structure—activity relationships of small molecule inhibitors of the simian virus 40 T antigen oncoprotein, an anti-polyomaviral target. Bioorg Med Chem. 2014 Nov 15;22(22):6490-6502. doi: 10.1016/j.bmc.2014.09.019. PMID: 25440730; PMCID: PMC4293281.
- 2. Wright CM, Seguin SP, Fewell SW, Zhang H, Ishwad C, Vats A, Lingwood CA, Wipf P, Fanning E, Pipas JM, Brodsky JL. Inhibition of Simian Virus 40 replication by targeting the molecular chaperone function and ATPase activity of T antigen. Virus Res. 2009 Apr;141(1):71-80. doi: 10.1016/j.virusres.2008.12.018. Epub 2009 Feb 4. PMID: 19200446; PMCID: PMC2758074.

In vivo study

TBD

### 7. Bioactivity

Biological target:

116-9e (MAL2-11B) is a Hsp70 co-chaperone DNAJA1 inhibitor.

In vitro activity

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One compound, MAL2-11B, inhibited both TAg's endogenous ATPase activity and the TAg-mediated activation of Hsp70. MAL2-11B also reduced SV40 propagation in plaque assays and compromised DNA replication in cell culture and in vitro. Furthermore, the compound significantly reduced the growth of BK virus in a human kidney cell line.

Reference: Virus Res. 2009 Apr;141(1):71-80. https://pubmed.ncbi.nlm.nih.gov/19200446/

In vivo activity

TBD

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.