

Supporting Information

Potent Inhibitory Activities of the Adenosine Analogue Cordycepin on SARS-CoV-2 Replication

Amgad M. Rabie^{a,b,*}

**^a Dr. Amgad Rabie's Research Lab. for Drug Discovery (DARLD), Mansoura 35511,
Egypt**

**^b Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Mansoura
University, Mansoura 35516, Egypt**

*** E-mails: amgadpharmacist1@yahoo.com, dr.amgadrabie@gmail.com**

ORCID iD: 0000-0003-3681-114X

Comparison of input compound with dataset compounds

Value of Cordycepin
Mean value of dataset

Distribution of molweight

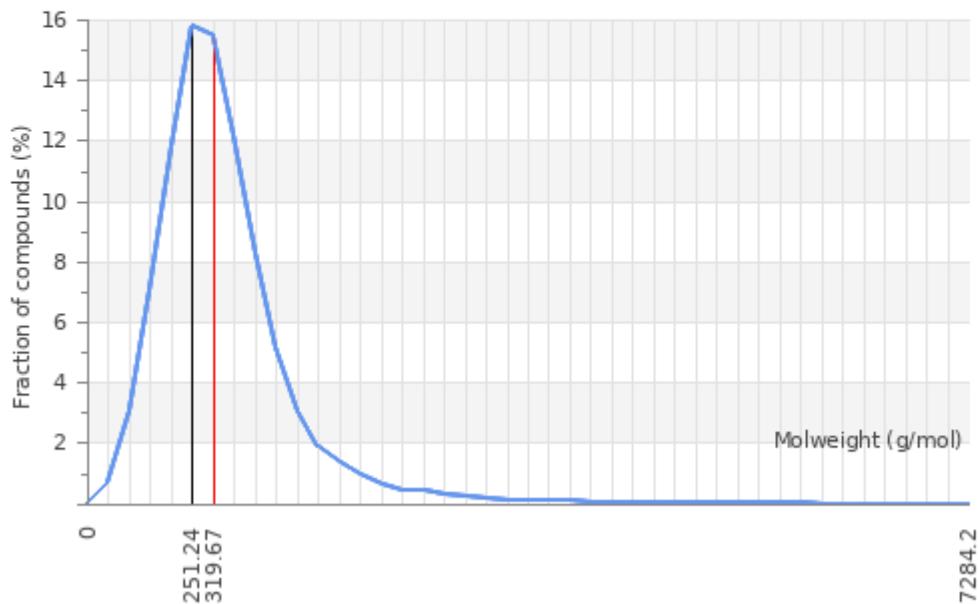


Figure S1. Graphic comparison of the molecular weight (molweight) of cordycepin with the mean value of molecular weights of all the dataset compounds (using ProTox-II Virtual Laboratory methodology).

Toxicity Model Report

Classification	Target	Shorthand	Prediction	Probability
Organ toxicity	Hepatotoxicity	dili	Inactive	0.63
Toxicity end points	Carcinogenicity	carcino	Inactive	0.68
Toxicity end points	Immunotoxicity	immuno	Inactive	0.99
Toxicity end points	Mutagenicity	mutagen	Active	0.69
Toxicity end points	Cytotoxicity	cyto	Inactive	0.58
Tox21-Nuclear receptor signalling pathways	Aryl hydrocarbon Receptor (AhR)	nr_ahr	Inactive	0.89
Tox21-Nuclear receptor signalling pathways	Androgen Receptor (AR)	nr_ar	Inactive	0.99
Tox21-Nuclear receptor signalling pathways	Androgen Receptor Ligand Binding Domain (AR-LBD)	nr_ar_lbd	Inactive	1.0
Tox21-Nuclear receptor signalling pathways	Aromatase	nr_aromatase	Inactive	0.91
Tox21-Nuclear receptor signalling pathways	Estrogen Receptor Alpha (ER)	nr_er	Inactive	0.98
Tox21-Nuclear receptor signalling pathways	Estrogen Receptor Ligand Binding Domain (ER-LBD)	nr_er_lbd	Inactive	1.0
Tox21-Nuclear receptor signalling pathways	Peroxisome Proliferator Activated Receptor Gamma (PPAR-Gamma)	nr_ppar_gamma	Inactive	0.80
Tox21-Stress response pathways	Nuclear factor (erythroid-derived 2)-like 2/antioxidant responsive element (nrf2/ARE)	sr_are	Inactive	0.99
Tox21-Stress response pathways	Heat shock factor response element (HSE)	sr_hse	Inactive	0.99
Tox21-Stress response pathways	Mitochondrial Membrane Potential (MMP)	sr_mmp	Inactive	0.97
Tox21-Stress response pathways	Phosphoprotein (Tumor Suppressor) p53	sr_p53	Inactive	0.81
Tox21-Stress response pathways	ATPase family AAA domain-containing protein 5 (ATAD5)	sr_atad5	Inactive	0.71

Figure S2. A screenshot of the output table for the ProTox-II Toxicity Model Report which demonstrates the expected probabilities of the main toxicities computationally analyzed for cordycepin molecule inside the human body (using ProTox-II Virtual Laboratory methodology).