

Additional file 2

Table S2: Prompts used in two text generation tasks

Task	No.	Prompt	Model
Chemical compound definition generation	P1	{entity}	GPT-2, GPT-3, GPT-neo, Bloom, BioGPT, BioGPT-large, ChatGPT, GPT-4
	P2	{entity} is	
	P3	Question: What is the {entity} ?\n\nAnswer:	Galactica
Chemical compound definition generation + context	P4	{entity} is a compound	GPT-2, GPT-3, GPT-neo, Bloom, BioGPT, BioGPT-large, ChatGPT, GPT-4
	P5	{entity} is a substance	
	P6	Question: What is a compound {entity} ?\n\nAnswer:	Galactica
	P7	Question: What is a substance {entity} ?\n\nAnswer:	
Chemical-fungus relation determination via entity generation	P8	{entity} is isolated from	GPT-2, GPT-3, GPT-neo, Bloom, BioGPT, BioGPT-large, ChatGPT, GPT-4
	P9	{entity} originally isolated from	
	P10	{entity} is produced by	
	P11	{entity} is a natural chemical compound found in	
	P12	{entity} is a natural product found in	
Chemical-fungus relation determination via entity generation + context	P13	{entity} is isolated from the fungus	GPT-2, GPT-3, GPT-neo, Bloom, BioGPT, BioGPT-large, ChatGPT, GPT-4
	P14	{entity} is isolated from fungi	
	P15	{entity} is isolated from fungi, such as	
	P16	{entity} is produced by the fungus	
	P17	{entity} is produced by fungi	
	P18	{entity} is produced by fungi, such as	
	P19	Question: Which fungus produces {entity} ?\n\nAnswer:	Galactica