

Supporting Information of

**Hybrid Gels by Combining Low Molecular Weight Glycolipid  
Gelator with Agarose: A Promising Soft Material for Efficient  
Dye Removal**

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The supporting information contains:

3 Pages

3 Figures

2 Tables

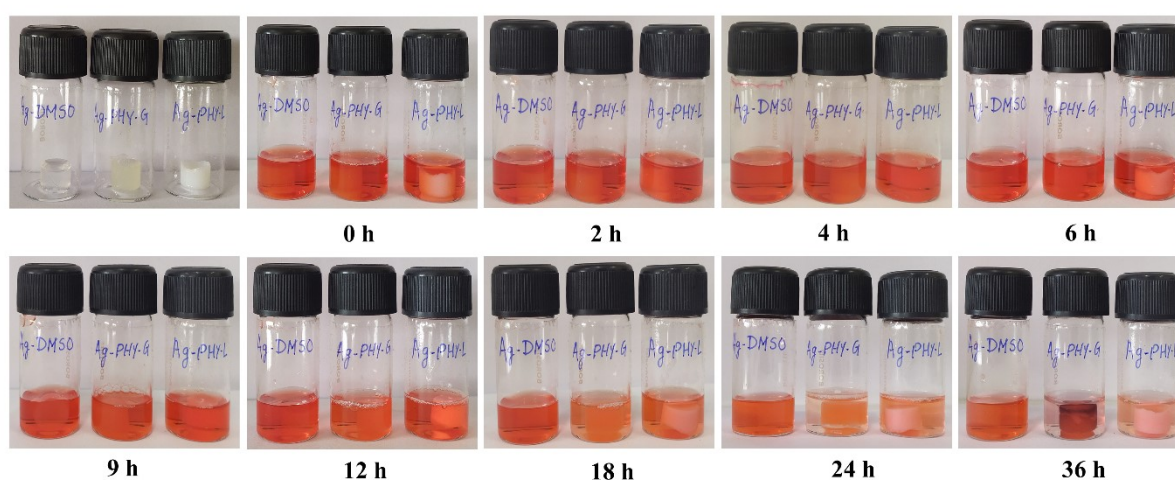
**Table S1.** Gelation behavior glycolipids in different solvents

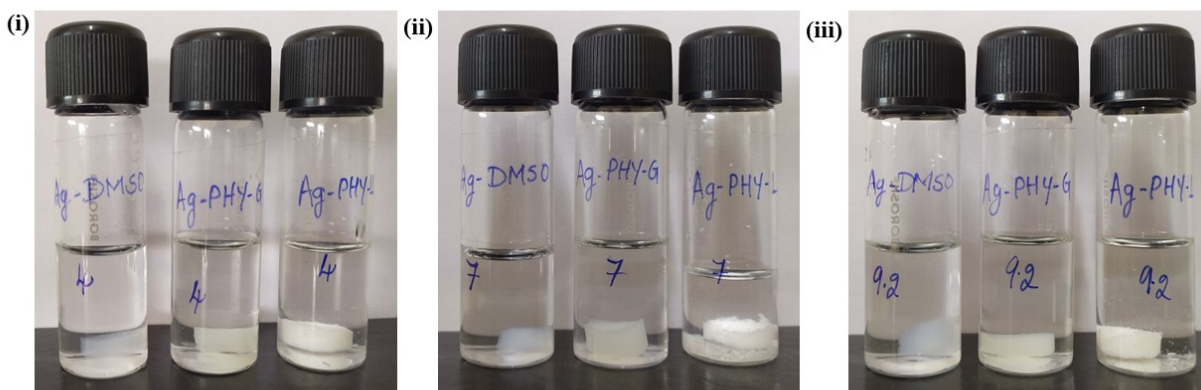
Solvent	PHY-G	PHY-L	Solvent	PHY-G	PHY-L
Pentane	I	I	Dioxane	S <sup>a</sup>	I
Hexane	I	I	THF	S <sup>a</sup>	I
Cyclohexane	I	I	Water	PS	PS
Toluene	S <sup>a</sup>	I	Methanol	S	S
Xylene	S <sup>a</sup>	I	DMF	S	S
Chloroform	S <sup>a</sup>	I	DMSO	S	S
Acetone	S <sup>a</sup>	I	DMF:Water <sup>b</sup> (1:1)	P	P
Ethanol	S <sup>a</sup>	I	DMSO:Water <sup>b</sup> (1:1)	G	G
				(9 mg/mL)	(15 mg/mL)
Propan-2-ol	S <sup>a</sup>	I	Methanol:Water <sup>b</sup> (1:1)	P	P

S: soluble; S<sup>a</sup>: soluble on heating; PS: Partially soluble; I: Insoluble; G: gel; P: Precipitate; <sup>b</sup>heating-cooling method.

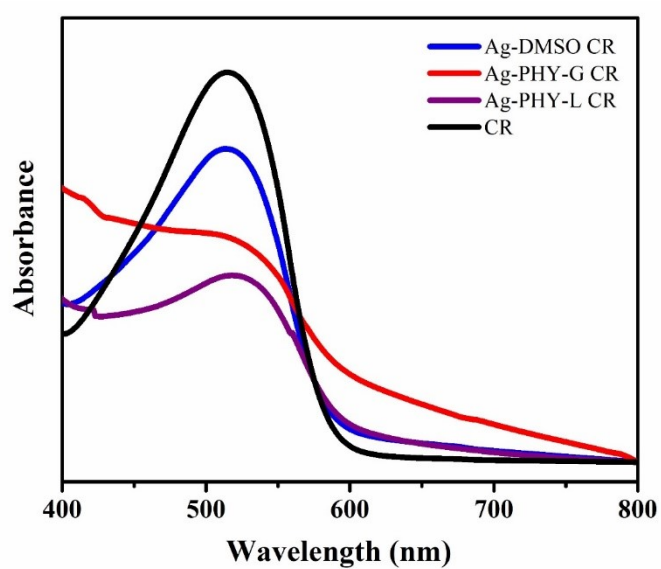
**Table S2.** Individual component concentrations used in the preparation of hybrid gels (1 mL).

Sample	Agarose in 0.5 mL water	Glycolipid in 0.5 mL DMSO
<b>Ag-DMSO</b>	20 mg	-
<b>Ag-PHY-G</b>	20 mg	9 mg
<b>Ag-PHY-L</b>	20 mg	15 mg

**Fig. S1** Photographs of hybrid gels showing time-based adsorption of Congo red.



**Fig. S2** Photographs of vials displaying stability of hybrid gel at different pH (4, 7, 9.2) after two days.



**Fig. S3** UV-visible spectrum of Congo red and dye-incorporated hybrid gels.