

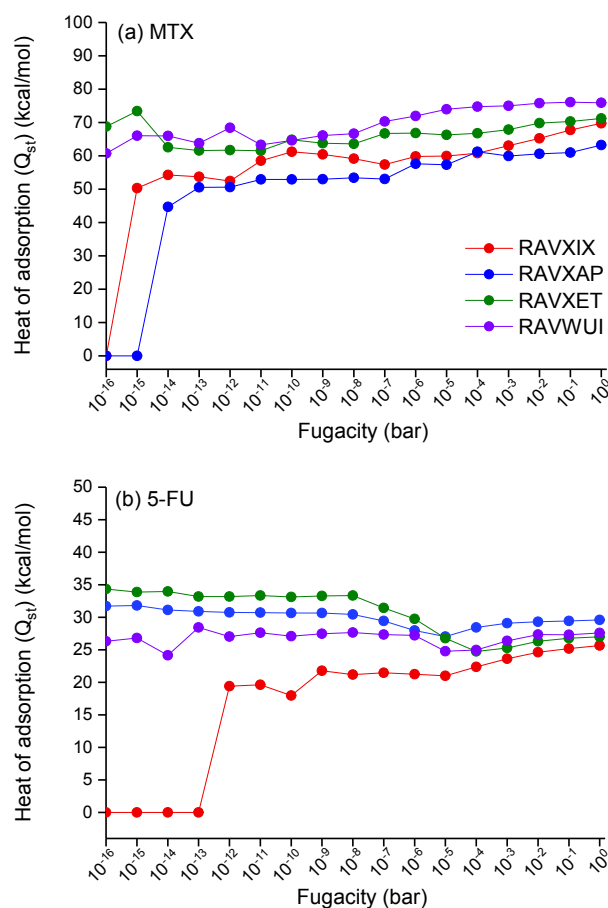
**Electronic Supplementary Information**  
**for**  
**Computational Investigation of Metal Organic Frameworks for**  
**Storage and Delivery of Anticancer Drugs**

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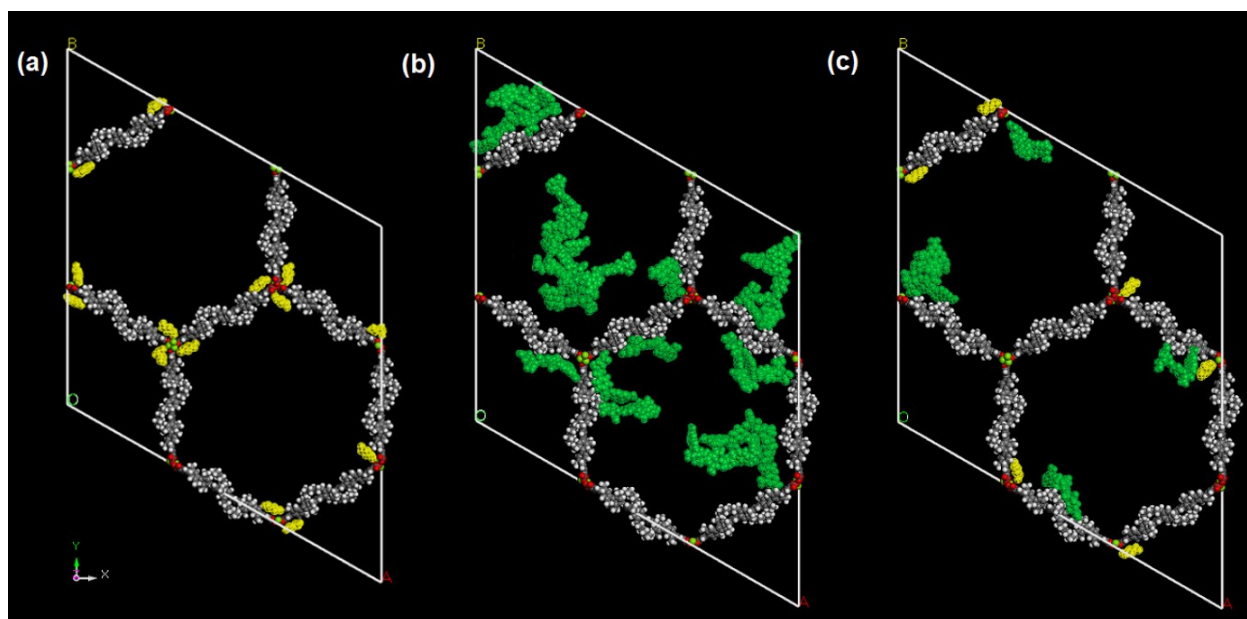
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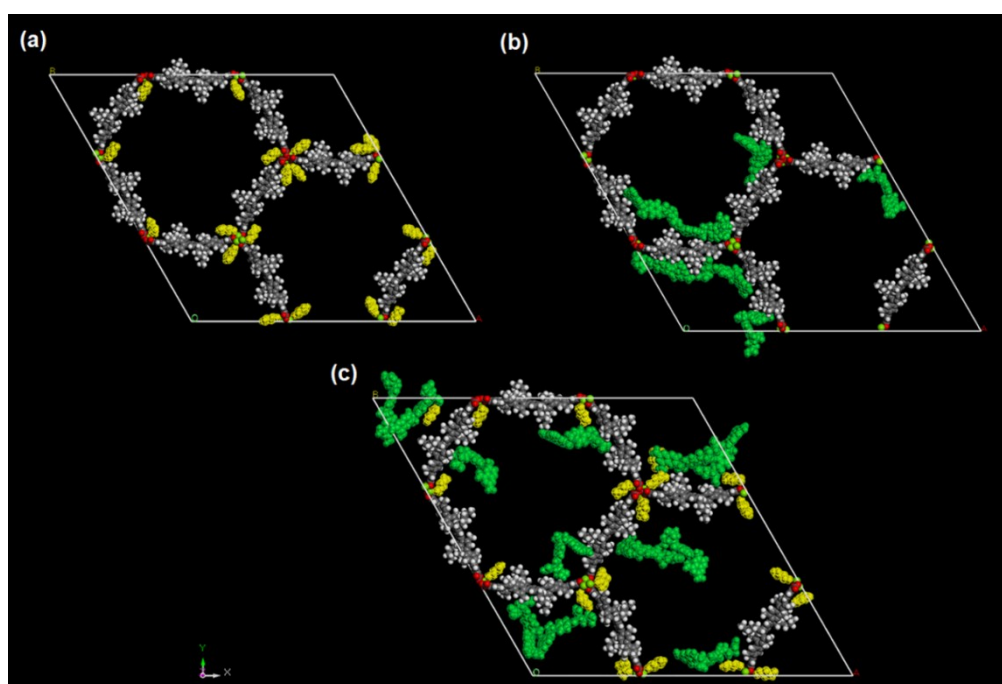
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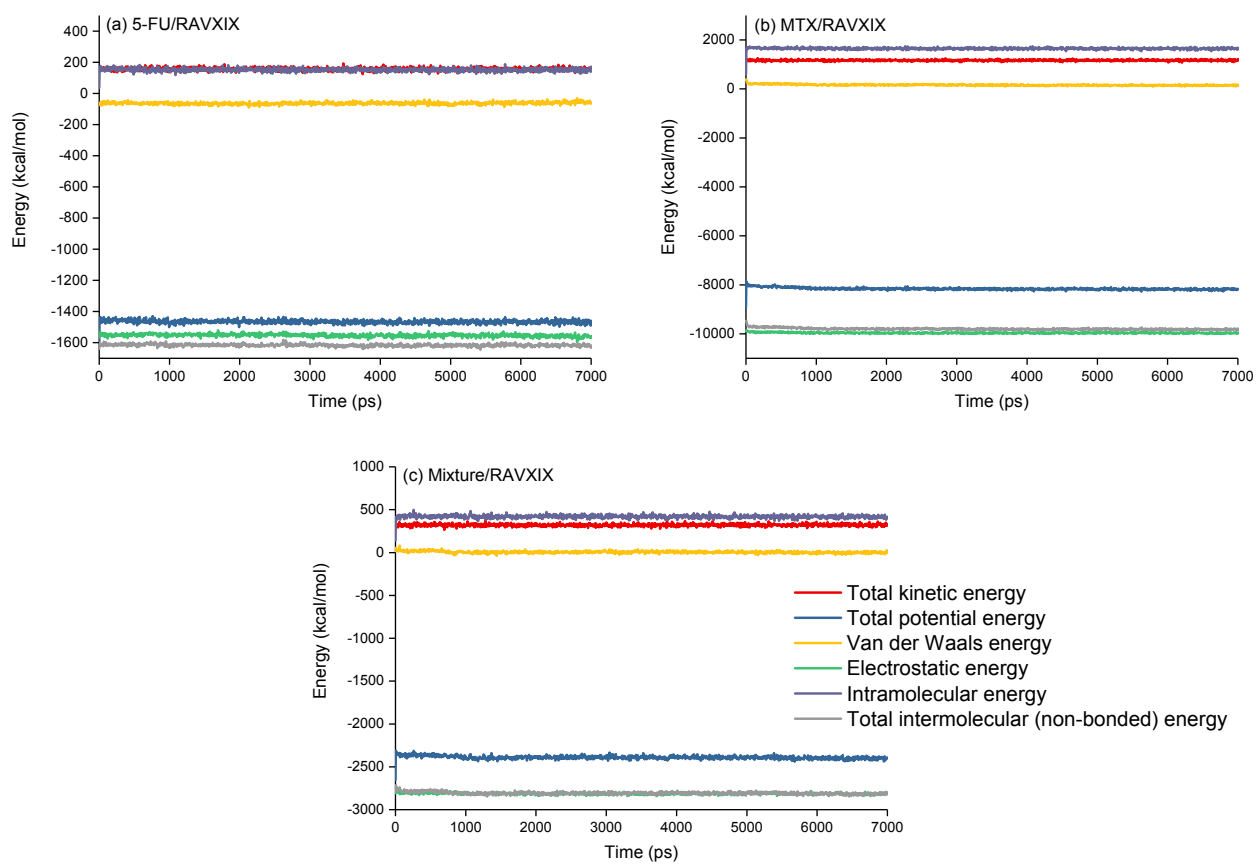
**Figure S1.** The heat of adsorption as a function of fugacity for (a)MTX and (b)5-FU adsorption in MOFs, RAVXIX, RAVXAP, RAVXET and RAVWUI.



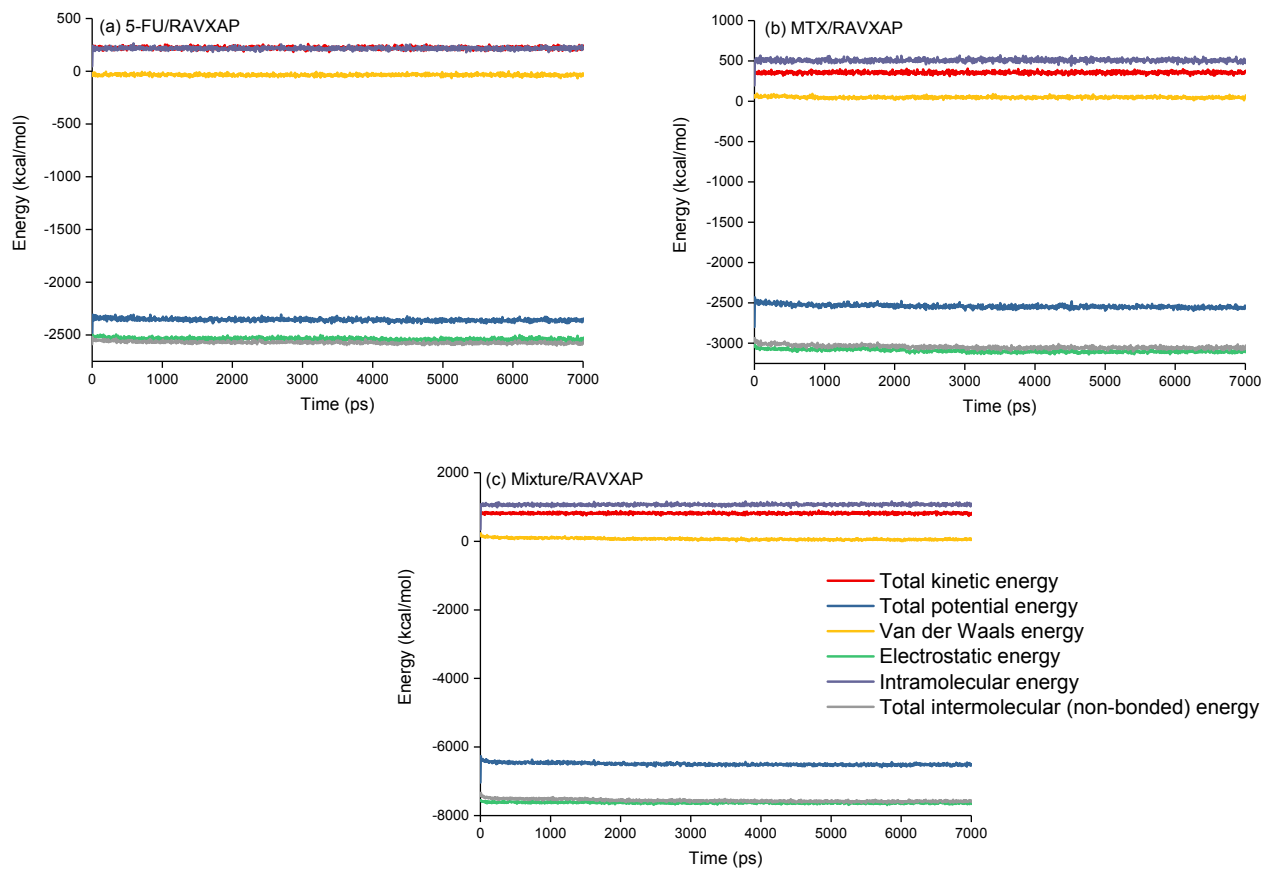
**Figure S2.** Snapshots of drug adsorption simulations in RAVXIX: (a)5-FU, (b)MTX and (c)5-FU/MTX mixture. 5-FU (MTX) molecules are shown with yellow (green) space-filling model.



**Figure S3.** Snapshots of drug adsorption simulations in RAVXAP: (a) 5-FU, (b) MTX and (c) 5-FU/MTX mixture. 5-FU (MTX) molecules are shown with yellow (green) space-filling model.



**Figure S4.** Energy analysis of RAVXIX during MD simulations.



**Figure S5.** Energy analysis of RAVXAP during MD simulations.