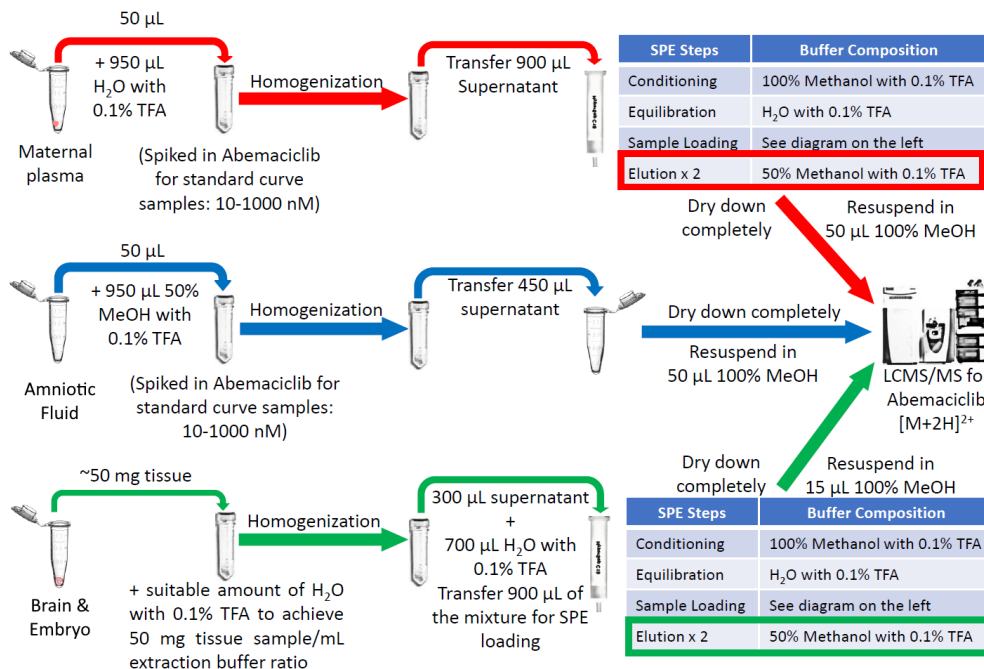
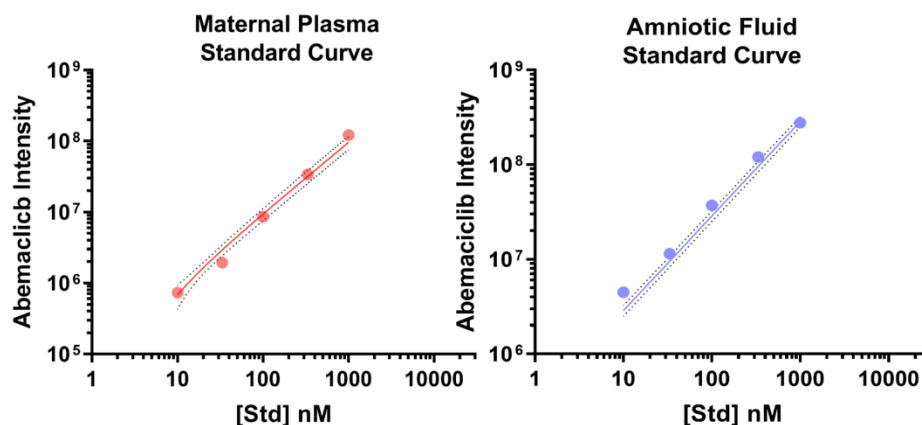


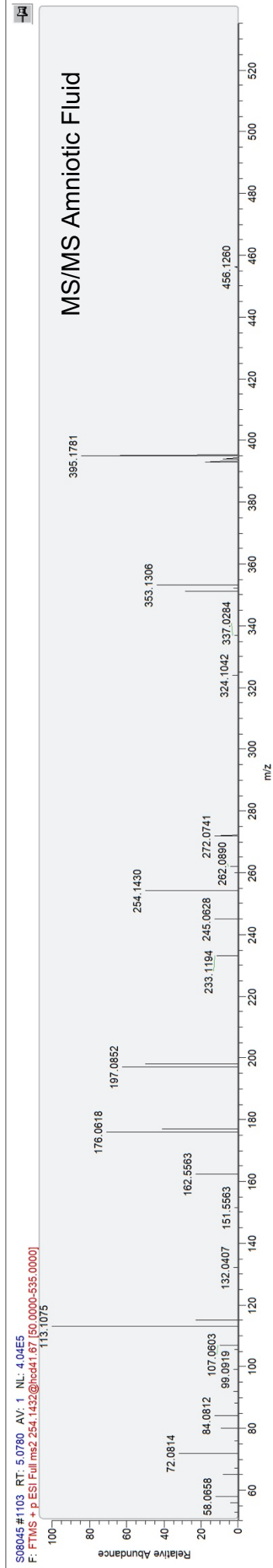
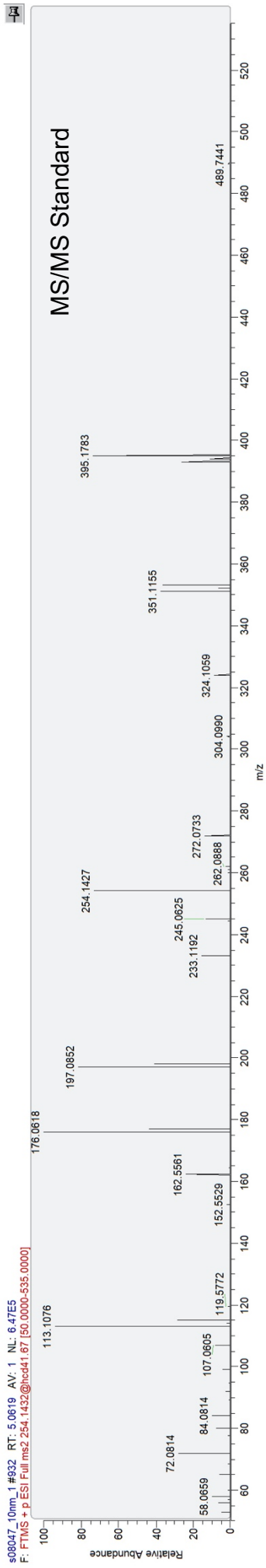
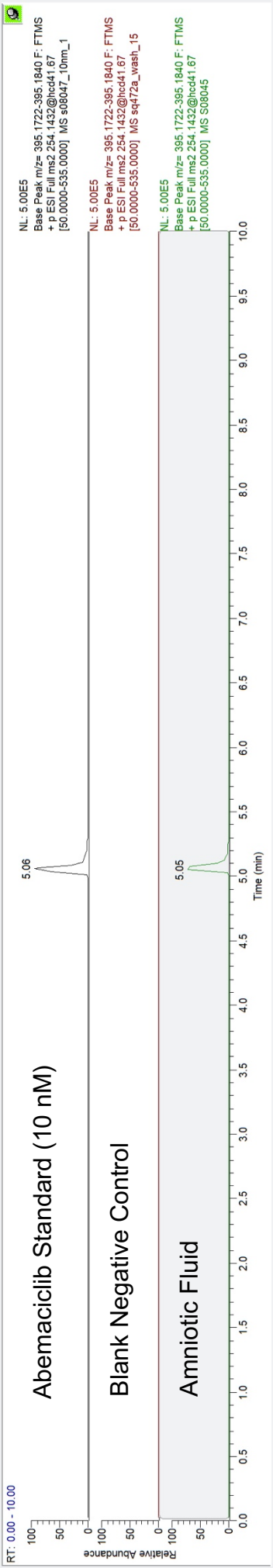
Supplementary Figure 2. Representative FACS gating strategy of live cells (a), singlets (b), and bivariate analysis of EdU-488 and propidium iodide (c) in HCT-116 cells, related to Figure 2e.



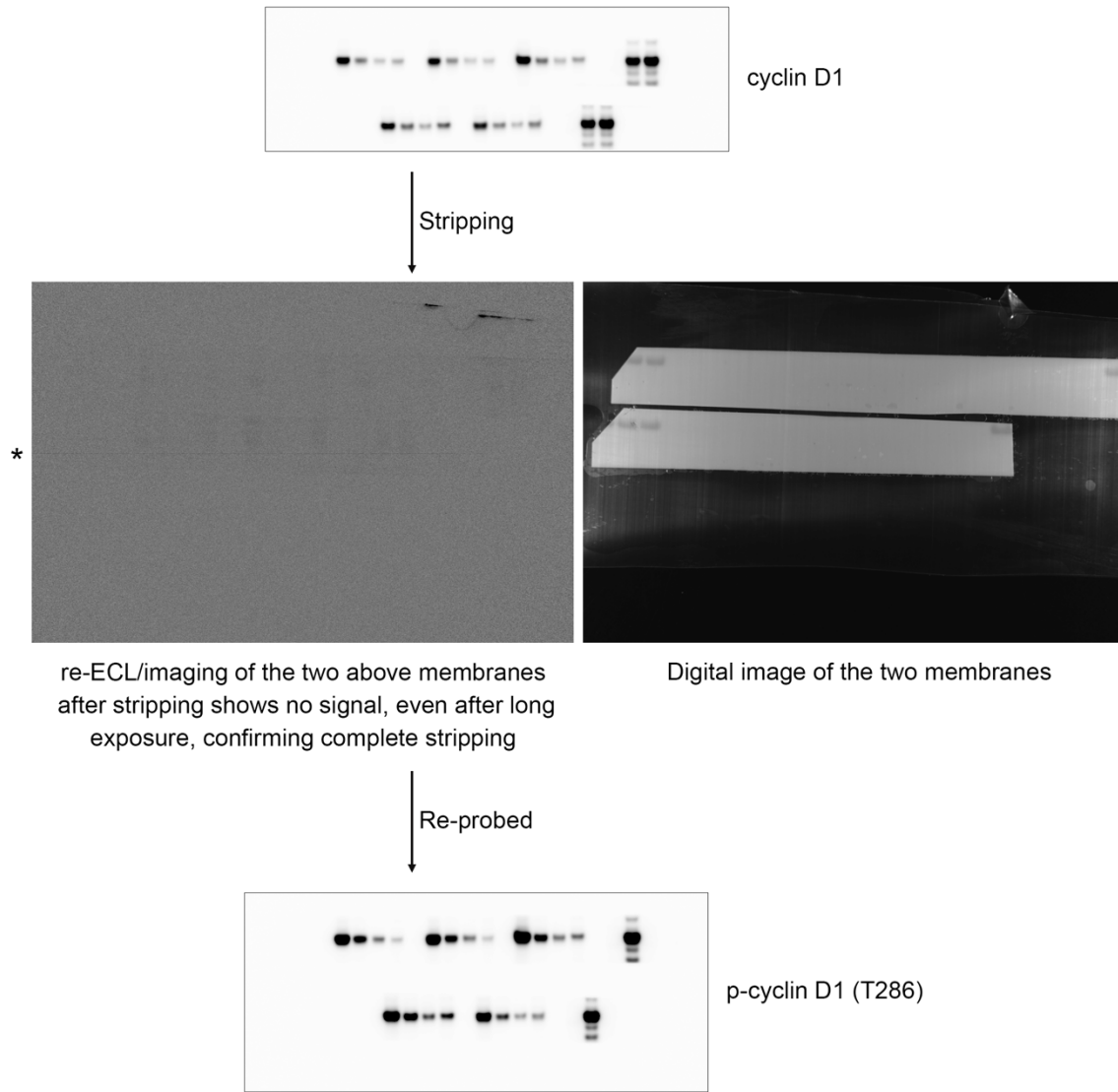
Supplementary Figure 3. Schematic flowchart of the protocol utilized for the identification of abemaciclib by LC-MS/MS from maternal plasma (red arrows), amniotic fluid (blue arrows), and maternal brain tissue and embryonic tissue (green arrow).



Supplementary Figure 4. Abemaciclib external standard curves (LC-MS/MS) for the matrix controls, generated by spiking abemaciclib from 10-1000 nM in maternal plasma (red line) and amniotic fluid (blue line) collected from vehicle-treated (phosphate-buffered saline, PBS) mice. Data are presented as mean values of duplicates \pm S.D. Error bars may not show if shorter than the size of the symbol. Dotted line represents 95% confidence interval for the line of regression.



Supplementary Figure 5. Confirmation of abemaciclib structure identification and detection in amniotic fluid by LC-MS/MS. *Top* – Extracted ion chromatograms of a targeted PRM scan for abemaciclib in an authentic standard (black trace), blank control (red trace), and representative amniotic fluid sample (green trace). All traces are on a fixed intensity scale ($5e5$), and represent the characteristic fragment ion at 395.1790 m/z (theoretical) resulting from the fragmentation of the alkyl piperazine ($C_6H_{13}N_2$, 113.1073 m/z). *Middle* – Tandem MS spectrum of the authentic standard (10 nM) for abemaciclib (black trace, 5.06 min). *Bottom* – Tandem MS spectrum of the peak detected in a representative amniotic fluid sample (100 mg/kg dose).



Supplementary Figure 6. Representative image of two immunoblotted PVDF membranes probed first with an α -cyclin D1 antibody, stripped with stripping buffer, and reblotted with an α -phospho-cyclin D1 (T286) antibody (see Extended Data Fig. 4n). Re-ECL and imaging of the stripped membranes was performed to confirm stripping efficiency. The asterisk (*) indicates a row of dead pixels from the CCD camera of the chemiluminescent imager.