





**(E)** 



.....

(C)

AHR binding site



PD-L1 promoter

**FIGURE S5** The TDO2-AHR pathway is required for transactivation of *PD-L1* and *TDO2* in colon cancer spheroids. A, B, qPCR analyses of *PD-L1*, *TDO2*, and *IL-1b* in the spheroids treated with the indicated concentrations of the inhibitor of (A) TDO2 or (B) AHR for 96 hrs (CRC-24M). C, An AHR binding site of the human *PD-L1* promoter based on published data (Wang et al, 2019). D, ChIP analyses of the AHR-bound promotors of the *PD-L1* and *IL-1b* genes in spheroid cells (CRC-29M) treated with the TDO2 inhibitor (100  $\mu$ M) or AHR inhibitor (50  $\mu$ M) for 96 hr. Enrichment over input (% input) was measured by qPCR. E. qPCR analyses of CD44 in the spheroids treated with TDO2 inhibitor (100  $\mu$ M), AHR inhibitor (50  $\mu$ M), XAV (1  $\mu$ M), or IWR1 (10  $\mu$ M). Values represent the mean ± s.d. \**P* < 0.05, \*\**P* < 0.01, \*\*\**P* < 0.001.