

MOLECULAR CANCER RESEARCH

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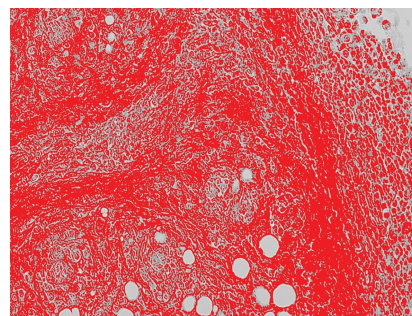
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- 1234** **Stromal DDR2 Promotes Ovarian Cancer Metastasis through Regulation of Metabolism and Secretion of Extracellular Matrix Proteins**
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ABOUT THE COVER

Stromal cell receptor roles in ovarian cancer metastatic niche induction are poorly defined. In their study on page 1234, Schab and colleagues discovered that expression of collagen receptor tyrosine kinase discoidin domain receptor 2 (DDR2) negatively correlates with overall survival in ovarian cancer. Genetic and pharmacologic DDR2 inhibition in primary mesothelial cells and omental fibroblasts hindered ovarian cancer invasion in co-cultures *in vitro*, and *Ddr2*-deficient mice exhibited decreased ovarian cancer tumor growth, collagen deposition, and peritoneal spread. The cover image depicts picosirius red staining of total collagen in an ovarian tumor from a *Ddr2* wild-type mouse. Mechanistically, the authors found that DDR2 activates PI3K/AKT/mTOR signaling in ovarian cancer stromal cells, which promotes stromal glycolysis and protein production. The authors showed that enhanced secretion of collagen synthesis proteins, such as lysyl oxidase like protein 2 (LOXL2), particularly underlies stromal DDR2-mediated ovarian cancer cell invasion and metastasis. This article is also Highlighted on page 1121.



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