Development of tumor ECM-modifying bispecific antibody for cancer immunotherapy

POSTECH



ONCOLOGY	Hit
Product Type	Bispecific antibody
Indication	Breast cancer & Lung cancer
Target	DDR1 and TGF-β
MOA(Mechanism of Action)	Inhibition of collagen matrix formation and TGF-β inactivation with TGF-β receptor II extracellular domain
Competitiveness	 Unlike existing DDR1 protein-targeted treatments, the main mechanism is to inhibit changes in collagen fiber structure through an antibody-based form. Bispecific antibody can inhibit the activation of cancer-associated fibroblasts (CAFs) while promoting the activity of surrounding T cells. Due to the elevated presence of DDR1 in the microenvironment of cancer cells and tumor stroma compared to normal tissue, the side effects arising from TGF-β small molecule inhibitors can be reduced.
Development Stage	Hit
Route of Administration	Subcutaneous & Intravenous injection