

# Protein could improve recovery from heart attacks

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Angiogenesis, the development of new blood vessels, is required during embryonic development and wound healing, as well as during disease processes such as tumor growth. The signals that direct angiogenesis are incompletely understood, but could represent novel targets for the development of therapies that promote or inhibit this process.

In this paper, Young-Guen Kwon and colleagues, of Yonsei University in Seoul, Korea, investigated the role of two related proteins- DKK1 and DKK2- in angiogenesis.

These proteins are known to have similar functions in inhibiting a particular cell signaling pathway, but Kwon and colleagues found that they played opposite roles in directing angiogenesis. Remarkably, they discovered that injection of DKK2 improved vascular regeneration in a [mouse model](#) of myocardial infarction ([heart attack](#)).

The researchers are hopeful that pharmacological manipulation of DKK1 and DKK2 could be used to treat various vascular diseases.

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